

December 13, 2022

New Mexico Oil Conservation Division

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

Re: Closure Request

Leamex #018 Flowline

Incident Number NAPP2229947721

Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Permian, LLC (Maverick), has prepared this *Closure Request* to document assessment and soil sampling activities performed at the Leamex #018 Flowline (Site; Figure 1). The purpose of the soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water and crude oil off pad caused by a flowline failure. Based on Site assessment, excavation activities, and laboratory analytical results from soil sampling events, Maverick is reqesting closure for Incident Number NAPP2229947721.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit P, Section 16, Township 17 South, Range 33 East, in Lea County, New Mexico (32.830697° N, 103.662348° W) and is associated with oil and gas exploration and production operations on surface land owned and managed by the State of New Mexico.

On October 18, 2022, a flowline failure caused the release of approximately 2.3 barrels (bbls) of produced water and 1.0 bbl of crude oil into the surrounding pasture area. No free-standing fluids were recovered but initial response and removal of saturated soils from the release area were completed. Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on October 24, 2022. The release was assigned Incident Number NAPP2229947721.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with

depth to groundwater data is United States Geologic Survey (USGS) permitted well 324939103394501, located approximately 1,099 feet south of the Site. The groundwater well has a reported depth to groundwater of 172 feet bgs and total depth depth of 198 feet bgs. Ground surface elevation at the groundwater well location is 4,177 feet above mean sea level (amsl), which is approximately 12 feet higher in elevation than the Site. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is an intermitent stream, located approximately 9,461 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, or church. The Site is within 300 feet of a mapped wetland. The Site is greater than 1,000 feet of a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

INITIAL SITE ASSESSMENT ACTIVITIES

On October 27, 2022, Ensolum evaluated the release based on information provided on the Form C-141 and visual observations. In total, six soil samples were collected during the initial Site assessment and delineation soil sampling activities. Soil samples SS01, SS02, and SS04 were collected within the release extent at a depth of 0.2 feet bgs, to assess surficial soils within the release. Soil samples SS03, SS05, and SS06 were collected in each cardinal direction of the release to verify the lateral extent. On November 28, 2022, Ensolum returned to the Site to collect an additional lateral delineation sample (SS07) south of the release extent to further confirm the lateral extent.

All soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was conducted during the Site visit. A photographic log is included in Appendix C.

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 chemcials 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 soil samples SS01, SS02, and SS04 indicated TPH and/or chloride concentrations exceeded the Site Closure Criteria. Laboratory analytical results for soil samples SS03, SS05, SS06, and SS07, collected outside the release extent indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

EXCAVATION ACTIVITIES

Between October 27 and November 2, 2022, excavation activities were conducted at the Site based on the results of the initial assessment. Excavation activities were performed via hand shoveling and back-hoe to depths ranging from 2 feet to 3 feet bgs. To direct excavation activities, soil was field screened for VOCs and chloride. On November 2, 2022, Ensolum personnel conducted final confirmation sampling after impacted soil had been removed. Photographic documentation of the excavation activities is included in Appendix C.

Following removal of impacted soil, eleven 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS11 were collected from the floor of the excavation, ranging from 2 feet to 3 feet bgs. Composite soil samples SW01 through SW05 were collected from the sidewalls of the excavation from depths ranging from the ground surface to 3 feet bgs. The soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 3.

Laboratory analytical results for excavation floor and sidewall samples collected at the terminal depth/extent of each composite soil sample location indicated all COC concentrations were compliant with the Site Closure Criteria, which are the most stringent standards from *Table I*. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

The excavation measured approximately 2,152 square feet in areal extent. A total of approximately 239 cubic yards of impacted soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the R360 Disposal Facility in Hobbs, New Mexico. After laboratory analytical results for the confirmation soil samples were received, the excavation was backfilled.

CLOSURE REQUEST

Based on confirmation soil sample laboratory analytical results compliant with most stringent Closure Criteria from *Table I*, excavation activities have successfully remediated the produced water and crude oil impacts at the Site. Delineation soil samples collected outside the release extent and the excavation sidewall samples successfully define the edge of the release. Maverick believes these remedial actions have been protective of human health, the environment, and groundwater. As such, Maverick respectfully requests closure for Incident Number NAPP2229947721. The Final C-141 is included in Appendix A and required notifications are included as Appendix E.



If you have any questions or comments, please contact Ms. Kalei Jennings at (817) 683-2503 or kjennings@ensolum.com.

Daniel R. Moir, PG

Senior Managing Geologist

Sincerely, **Ensolum, LLC**

Josh Adams, PG Project Geologist

cc: Bryce Wagoner, Maverick Permian, LLC

New Mexico State Land Office

Attachments:

Figure 1 Site Location Map

Figure 2 Delineation Soil Sample Locations Figure 3 Excavation Soil Sample Locations Table 1 Soil Sample Analytical Results

Appendix A Final C-141

Appendix B Referenced Well Records

Appendix C Photographic Log

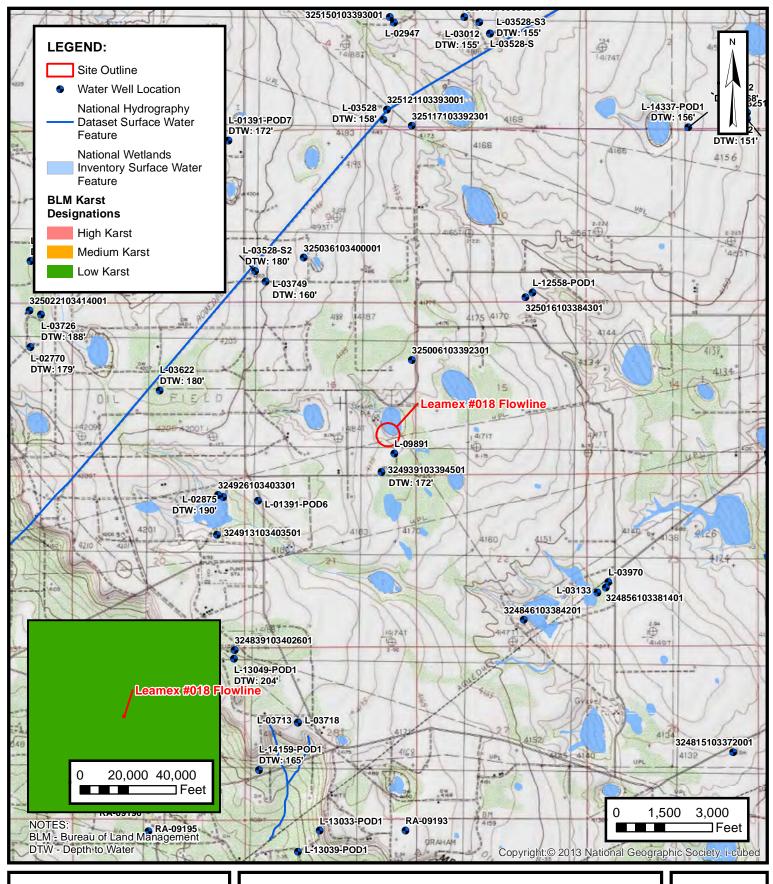
Appendix D Laboratory Analytical Reports

Appendix E NMOCD Notifications





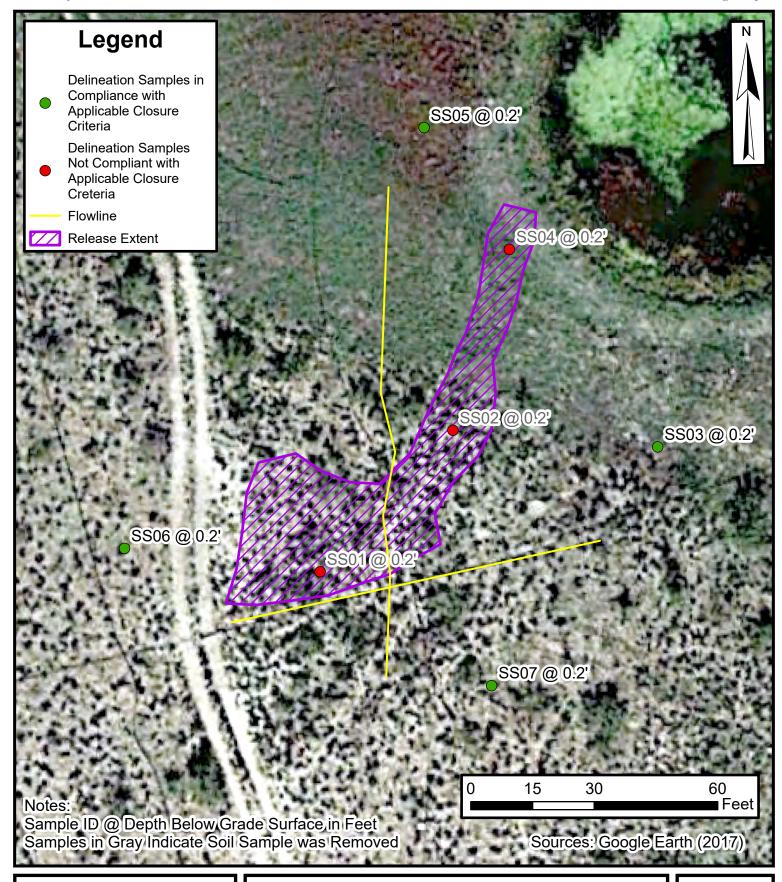
FIGURES





SITE RECEPTOR MAP

MAVERICK PERMIAN LLC LEAMEX #018 FLOWLINE Incident Number NAPP2229947721 Unit P Sec 16 T17S R33E Lea County, New Mexico **FIGURE**

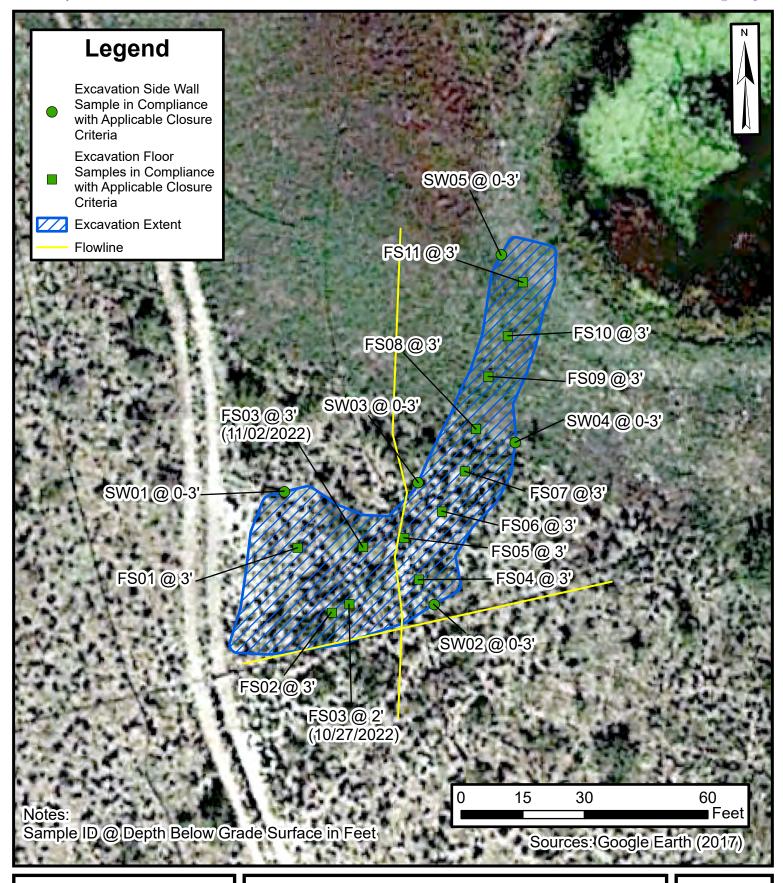




Delineation Soil Sample Locations

Leamex #018 Flowline Maverick Permian, LLC

NAPP2229947721 Unit P, Sec 16, T17S, R33E Lea County, New Mexico **FIGURE**





Excavation Soil Sample Locations

Leamex #018 Flowline Maverick Permian, LLC

NAPP2229947721 Unit P, Sec 16, T17S, R33E Lea County, New Mexico **FIGURE**



TABLE

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS

Leamex #018 Flowline Maverick Permian, LLC Lea County, New Mexico

Sample Identification	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes, Total (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1	Closure Criteria	(NMAC 19.15.29)	10	NE	NE	NE	50	NE	NE	NE	NE	100	600
						Delineation S	oil Samples						
SS01	10/27/2022	0.2	2.69	45.7	69.7	85.5	204	4,170	32,500	6,990	36,670	43,700	68.4
SS02	10/27/2022	0.2	<0.199	<0.199	< 0.199	<0.398	<0.398	574	21,600	5,160	22,174	27,300	1,070
SS03	10/27/2022	0.2	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	28.1
SS04	10/27/2022	0.2	<0.00199	< 0.00199	< 0.00199	<0.00398	<0.00398	<50.0	168	60.5	168	228.5	40.6
SS05	10/27/2022	0.2	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	102
SS06	10/27/2022	0.2	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	21.6
SS07	11/28/2022	0.2	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	17.4
						Excavation S	oil Samples						
SW01	11/02/2022	0-3	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	34.2
SW02	11/02/2022	0-3	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<50.0	33.7	<50.0	33.7	33.7	51.3
SW03	11/02/2022	0-3	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	32.4
SW04	11/02/2022	0-3	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.8	52.0	<49.8	52.0	52.0	30.0
SW05	11/02/2022	0-3	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	18.2
FS01	11/02/2022	3	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	91.0
FS02	11/02/2022	3	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.8	84.4	<49.8	84.4	84.4	40.5
FS03	10/27/2022	2	<0.00198	<0.00198	<0.00198	< 0.00397	< 0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	39.3
FS03	11/02/2022	3	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<49.9	40.6	<49.9	40.6	40.6	31.7
FS04	11/02/2022	3	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	18.7	<50.0	18.7	18.7	63.5
FS05	11/02/2022	3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	16.5	<50.0	16.5	16.5	65.4
FS06	11/02/2022	3	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	23.3
FS07	11/02/2022	3	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<50.0	11.1	<50.0	11.1	11.1	25.1
FS08	11/02/2022	3	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	18.0	<50.0	18.0	18.0	32.2
FS09	11/02/2022	3	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	23.9
FS10	11/02/2022	3	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	24.5
FS11	11/02/2022	3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	51.6

Notes:

bgs: below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

DRO: Diesel Range Organics

GRO: Gasoline Range Organics

mg/kg: milligrams per kilogram

NE: Not established

NMAC: New Mexico Administrative Code

NMOCD: New Mexico Oil Conservation Division

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

Grey text represents samples that have been excavated

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APPENDIX A

Final C141

Received by OCD: 10/26/2022 1:18:58 PM

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 Wd 12:82:2 2:07/11/1 : SuiSvui of posvojoy4
Form C-141

Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	nAPP2229947721
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

D 111	D / 1/	'1D ' II	<u> </u>	OCDID 3	221100					
		erick Permian, LL	.C			OGRID: 331199				
Contact Nan						Telephone: 928-241-1862				
Contact email: <u>Bryce.Wagoner@mavresources.com</u>					Incident #	‡ (assigned by OCD) nAPP2229947721				
Contact mailing address: 1410 NW County Road Hobbs, NM 88240										
			Location	n of R	delease S	ource				
Latitude 32.8	30697				Longitude	-103.662348_				
Editude 52.0	Latitude 32.830697 Longitude -103.662348 (NAD 83 in decimal degrees to 5 decimal places)									
Site Name: L	eamex #018	Flowline			Site Type					
Date Release	Discovered	October 18, 2022	2		API# (if ap)	pplicable) 30-025-24542				
Unit Letter	Section	Township	Range		Cour	ntv				
P	16	17 S	33 E	Lea		nty				
Surface Owne	r: 🛛 State	☐ Federal ☐ T	ribal 🔲 Private	(Name:)			
			Nature ar	id Vo	lume of .	Release				
					tions or specific	c justification for the volumes provided below)				
Crude Oi	1	Volume Releas	ed (bbls) 1.0 bbl	S		Volume Recovered (bbls) 0				
Produced	Water	Volume Releas	ed (bbls) 2.3 bbls	S		Volume Recovered (bbls) 0				
		Is the concentra	ntion of dissolved >10,000 mg/l?	l chloride	e in the	☐ Yes ☒ No				
Condensa	ate	Volume Releas	ed (bbls)			Volume Recovered (bbls)				
☐ Natural C	ias	Volume Releas	ed (Mcf)			Volume Recovered (Mcf)				
Other (de	escribe)	Volume/Weigh	t Released (provi	ide units)	Volume/Weight Recovered (provide	e units)			
Cause of Rel		v a flowline failu	re resulting in a r	າດກ_reno	rtable releas	se. When the well head was opened up,	it was discovered			
						se has been stopped and the impacted ar				
		-	nent and close ou	it the ren	nediation pro	ocess. Initial response and removal of s	saturated soil from			
the release ar	rea has been	completed.								

*Received by OCD: 10/26/2022 1:18:58 PM Form C-141 State of New Mexico Page 2 Oil Conservation Division

<u>Na 10.80.0 800</u>	C/II/I .paippmI of hashala
Incident ID	nAPP2229947721
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	
, ,	
Yes No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
,	
	Initial Response
The responsible	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.
The impacted area ha	s been secured to protect human health and the environment.
Released materials ha	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NM	IAC the responsible party may commence remediation immediately after discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred
	nt area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger
public health or the environs	ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have atteand remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In
addition, OCD acceptance o	f a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
and/or regulations.	
Printed Name:Bryce	e Wagoner Title:Permian HSE Specialist II
Signature: Bywy	Date:10/24/2022
email: Bryce.Wago	oner@mavresources.com Telephone:928-241-1862
emainBryce. wage	10.6p.no.10.
OCD Only	
Received by:	elyn Harimon Date: <u>10/26/2022</u>
i	

nAPP2229947721

				Pooled F	luids on the S	urface				
	Length (ft.)	Width (ft.)	Depth (in)	# of Boundaries *edges of pool where depth is 0 . don't count shared boundaries	Oil-Water Ratio (%)	Pooled Area (ft ²)	Estimated Average Depth (ft.)	Pooled Volume (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle B					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle C						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
		•			•	Total Vol	ume (bbls):	0.00	0.00	0.00

				Sul	bsurface Fluids	5				
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) *10% in consolidated sediments after rain to 50% in sand with no precipitation	Oil-Water Ratio (%)	Area (ft²)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	50.0	25.0	2.0	0.1	0.01	1250.0	37.1	3.0	0.03	2.9
Rectangle B	40.0	4.0	2.0	0.1	0.01	160.0	4.7	0.4	0.00	0.4
Rectangle C				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle D				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle E				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle F						0.0	0.0	0.0	0.00	0.0
Rectangle G						0.0	0.0	0.0	0.00	0.0
Rectangle H						0.0	0.0	0.0	0.00	0.0
Rectangle I						0.0	0.0	0.0	0.00	0.0
Rectangle J						0.0	0.0	0.0	0.00	0.0
						Total Vol	ume (bbls):	3.35	0.03	3.31

TOTAL RELEASE VOLUME (bbls): 3.3

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 153957

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	153957
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	10/26/2022

	Page 16 of 20	<i>)2</i>
Incident ID	NAPP2229947721	
District RP		
Facility ID		
Application ID		

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.				
What is the shallowest depth to groundwater beneath the area affected by the release?	>100 feet 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 X 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?	X 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?	X 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 well	ls.			

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

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

Received by OCD: 12/14/2022 7:58:20 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

	Page 17 of 2	02
Incident ID	NAPP2229947721	
District RP		
Facility ID		
Application ID		

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release no public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a the addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	tifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have reat to groundwater, surface water, human health or the environment. In
Printed Name: Bryce Wagoner Signature: bryce.wagoner@mavresources.com	Title:Permian HSE Specialist II Date:12/14/2022 Telephone:928-241-1862
OCD Only Received by: Jocelyn Harimon	Date:12/15/2022

Mate of New Mexico

Incident ID NA PP2229947721

Incident ID	NAPP2229947721
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.
	MAC
Photographs of the remediated site prior to backfill or photos of the must be notified 2 days prior to liner inspection)	e liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC Dist	trict office must be notified 2 days prior to final sampling)
□ Description of remediation activities	
I hereby certify that the information given above is true and complete to and regulations all operators are required to report and/or file certain relemay endanger public health or the environment. The acceptance of a C-1 should their operations have failed to adequately investigate and remedia human health or the environment. In addition, OCD acceptance of a C-1 compliance with any other federal, state, or local laws and/or regulations restore, reclaim, and re-vegetate the impacted surface area to the conditionaccordance with 19.15.29.13 NMAC including notification to the OCD was	ase notifications and perform corrective actions for releases which 141 report by the OCD does not relieve the operator of liability te contamination that pose a threat to groundwater, surface water, 41 report does not relieve the operator of responsibility for . The responsible party acknowledges they must substantially ons that existed prior to the release or their final land use in
Printed Name:Bryce Wagoner Title	e: Permian HSE Specialist II
Signature: Date:	12/1 <u>4/2022</u>
email: bryce.wagoner@mavresources.com Teleph	none: 928-241-1862
OCD Only	
Received by:	Date:12/15/2022
Closure approval by the OCD does not relieve the responsible party of lia remediate contamination that poses a threat to groundwater, surface water party of compliance with any other federal, state, or local laws and/or reg	, human health, or the environment nor does not relieve the responsible
Closure Approved by:	Date: 01/11/2023
Printed Name:Jennifer Nobui	Title: Environmental Specialist A



APPENDIX B

Referenced Well Record



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

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

Click to hideNews Bulletins

- Effective October 24, 2022 hyperlinks to legacy Current Condition pages will automatically redirect users to the corresponding Monitoring Location page. Please see the <u>Water Data For The Nation Blog</u> for full details, including how to navigate back to the legacy Current Condition page, if desired.
- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Table of data

Tab-separated data

Groundwater levels for the Nation

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

Search Results -- 1 sites found

Agency code = usgs site_no list =

• 324939103394501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 324939103394501 17S.33E.16.44330

Lea County, New Mexico
Latitude 32°49'39", Longitude 103°39'45" NAD27
Land-surface elevation 4,174 feet above NGVD29
The depth of the well is 198.00 feet below land surface.

This well is completed in the High Plains aguifer (N100HGHPLN) national aguifer.

This well is completed in the Ogallala Formation (1210GLL) local aquifer.

Output formats

<u>Graph of da</u>	<u>ata</u>									
Reselect pe	eriod_									
Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1991-04-1	.9	D	62610		4001.90	NGVD29	1		S	
1991-04-1	.9	D	62611		4003.55	NAVD88	1		S	
1991-04-1	.9	D	72019	172.10			1		S	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static

Section	Code	Description
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	Α	Approved for publication Processing and review completed.

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

Accessibility FOIA Privacy Policies and Notices

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

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

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2022-10-24 19:11:42 EDT

0.33 0.3 nadww02





APPENDIX C

Photographic Log



Photographic Log Maverick Permian, LLC Leamex #018 Flowline NAPP2229947721



Photograph 1 Date: 10/24/2022
Description: View of the release area prior to remediation, looking southwest



Photograph 2 Date:11/02/2022
Description: View of the release area after excavation activities, looking northeast



Photograph 3 Date: 11/02/2022 Description: View of the release area after excavation activities, looking southwest



Photograph 4 Date: 11/02/2022

Description: View of the release after excavation activities, looking south



APPENDIX D

Laboratory Analytical Report

Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3309-1

Laboratory Sample Delivery Group: 03D2057028

Client Project/Site: LeaMex 018

For:

💸 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Josh Adams

RAMER

11/1/2022 1:54:02 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for release by:

Have a Question?

EOL

.....LINKS

Review your project results through

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 1/11/2023 2:28:21 PM This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

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

Client: Ensolum
Project/Site: LeaMex 018

Laboratory Job ID: 890-3309-1
SDG: 03D2057028

Table of Contents

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

3

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6

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11

12

Definitions/Glossary

Job ID: 890-3309-1 Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

Qualifiers

GC VOA Qualifier

U

F1 MS and/or MSD recovery exceeds control limits.

Qualifier Description

F2 MS/MSD RPD exceeds control limits

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

GC Semi VOA

Qualifier **Qualifier Description** LCS and/or LCSD is outside acceptance limits, high biased. S1+ Surrogate recovery exceeds control limits, high biased.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

MDL Method Detection Limit MI 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

Practical Quantitation Limit **PQL**

PRES Presumptive **Quality Control** QC

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: Ensolum

Project/Site: LeaMex 018

Job ID: 890-3309-1

SDG: 03D2057028

Job ID: 890-3309-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3309-1

Receipt

The samples were received on 10/27/2022~4:12~PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was $4.6^{\circ}C$

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-3309-1), SS02 (890-3309-2) and FS03 (890-3309-3).

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-38226 and analytical batch 880-38213 were outside control limits. Non-homogeneity is 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: SS01 (890-3309-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-38261 and analytical batch 880-38217 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-38260 and analytical batch 880-38377 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: 890-3309-1 Project/Site: LeaMex 018 SDG: 03D2057028

Client Sample ID: SS01 Lab Sample ID: 890-3309-1 Date Collected: 10/27/22 08:35

Matrix: Solid

Date Received: 10/27/22 16:12

Sample Depth: 0.2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	2.69		0.402	mg/Kg		10/31/22 09:37	10/31/22 14:59	200
Toluene	45.7		0.402	mg/Kg		10/31/22 09:37	10/31/22 14:59	200
Ethylbenzene	69.7		0.402	mg/Kg		10/31/22 09:37	10/31/22 14:59	200
m-Xylene & p-Xylene	58.8		0.803	mg/Kg		10/31/22 09:37	10/31/22 14:59	200
o-Xylene	26.7		0.402	mg/Kg		10/31/22 09:37	10/31/22 14:59	200
Kylenes, Total	85.5		0.803	mg/Kg		10/31/22 09:37	10/31/22 14:59	200
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130			10/31/22 09:37	10/31/22 14:59	20
1,4-Difluorobenzene (Surr)	97		70 - 130			10/31/22 09:37	10/31/22 14:59	20
Method: TAL SOP Total BTEX	· Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	204		0.803	mg/Kg		_	11/01/22 13:51	
Method: SW846 8015 NM - Dies	sel Range Organ	ics (DRO) ((GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	43700		498	mg/Kg			11/01/22 13:05	
Method: SW846 8015B NM - Di	esel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	4170		498	mg/Kg		10/31/22 10:25	10/31/22 19:58	10
Diesel Range Organics (Over C10-C28)	32500	*+	498	mg/Kg		10/31/22 10:25	10/31/22 19:58	10
Oll Range Organics (Over C28-C36)	6990		498	mg/Kg		10/31/22 10:25	10/31/22 19:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	130		70 - 130			10/31/22 10:25	10/31/22 19:58	1
o-Terphenyl	119		70 - 130			10/31/22 10:25	10/31/22 19:58	1
Method: MCAWW 300.0 - Anio	ns, Ion Chromato	graphy - So	oluble					
A I4 -	Popult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	- KL	Oilit		Frepareu	Allalyzeu	Dil i a

Client Sample ID: SS02 Lab Sample ID: 890-3309-2 Date Collected: 10/27/22 08:55 Matrix: Solid

Date Received: 10/27/22 16:12

Sample Depth: 0.2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.199	U	0.199	mg/Kg		10/31/22 09:37	10/31/22 14:39	100
Toluene	<0.199	U	0.199	mg/Kg		10/31/22 09:37	10/31/22 14:39	100
Ethylbenzene	<0.199	U	0.199	mg/Kg		10/31/22 09:37	10/31/22 14:39	100
m-Xylene & p-Xylene	<0.398	U	0.398	mg/Kg		10/31/22 09:37	10/31/22 14:39	100
o-Xylene	0.278		0.199	mg/Kg		10/31/22 09:37	10/31/22 14:39	100
Xylenes, Total	<0.398	U	0.398	mg/Kg		10/31/22 09:37	10/31/22 14:39	100

Eurofins Carlsbad

Client Sample Results

Client: Ensolum Job ID: 890-3309-1 Project/Site: LeaMex 018 SDG: 03D2057028

Client Sample ID: SS02 Lab Sample ID: 890-3309-2 Date Collected: 10/27/22 08:55

Matrix: Solid

Date Received: 10/27/22 16:12

Sample Depth: 0.2'

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113	70 - 130	10/31/22 09:37	10/31/22 14:39	100
1,4-Difluorobenzene (Surr)	103	70 - 130	10/31/22 09:37	10/31/22 14:39	100
Mothod: TAL SOR Total PTEV To	etal PTEV Calculation				

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Total BTEX <0.398 U 0.398 11/01/22 13:51 mg/Kg

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL Unit D Prepared Analyzed Dil Fac **Total TPH** 27300 498 mg/Kg 11/01/22 13:05

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier D Analyte RL Unit Prepared Analyzed Dil Fac 498 10/31/22 10:25 10/31/22 20:19 **Gasoline Range Organics** 574 mg/Kg 10 (GRO)-C6-C10 **Diesel Range Organics (Over** 21600 *+ 498 mg/Kg 10/31/22 10:25 10/31/22 20:19 10 C10-C28) 10/31/22 10:25 **Oll Range Organics (Over** 5160 498 mg/Kg 10/31/22 20:19 10 C28-C36)

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 10/31/22 10:25 10/31/22 20:19 1-Chlorooctane 101 10 70 - 130 10/31/22 10:25 o-Terphenyl 114 10/31/22 20:19 10

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Dil Fac Analyte RL Unit D Prepared Analyzed Chloride 5.04 11/01/22 11:44 1070 mg/Kg

Client Sample ID: FS03 Lab Sample ID: 890-3309-3 Date Collected: 10/27/22 12:30 **Matrix: Solid**

Date Received: 10/27/22 16:12

Sample Depth: 24"

Total BTEX

10/31/22 11:55 1 10/31/22 11:55 1 10/31/22 11:55 1 10/31/22 11:55 1 10/31/22 11:55 1 10/31/22 11:55 1 10/31/22 11:55 1	10/31/22 09:37 1	mg/Kg mg/Kg mg/Kg	0.00198 0.00198	U	<0.00198	
10/31/22 11:55 1 10/31/22 11:55 1 10/31/22 11:55 1 10/31/22 11:55 1			0.00198		<0.00196	Benzene
10/31/22 11:55 1 10/31/22 11:55 1 10/31/22 11:55 1	10/31/22 09:37 1	mg/Kg		U	<0.00198	Toluene
10/31/22 11:55 1 10/31/22 11:55 1			0.00198	U	<0.00198	Ethylbenzene
10/31/22 11:55 1	10/31/22 09:37 1	mg/Kg	0.00397	U F1	<0.00397	m-Xylene & p-Xylene
	10/31/22 09:37 1	mg/Kg	0.00198	U F2 F1	<0.00198	o-Xylene
Analyzed Dil Fac	10/31/22 09:37 1	mg/Kg	0.00397	U F2 F1	<0.00397	Xylenes, Total
	Prepared		Limits	Qualifier	%Recovery	Surrogate
10/31/22 11:55	10/31/22 09:37		70 - 130		98	4-Bromofluorobenzene (Surr)
10/31/22 11:55 1	10/31/22 09:37 1		70 - 130		102	1,4-Difluorobenzene (Surr)
	10/31/22 09:37		70 - 130	<u> </u>	98 102	4-Bromofluorobenzene (Surr)

Eurofins Carlsbad

11/01/22 13:51

0.00397

mg/Kg

<0.00397 U

Matrix: Solid

Lab Sample ID: 890-3309-3

Analyzed

11/01/22 11:59

Client Sample Results

Client: Ensolum Job ID: 890-3309-1 Project/Site: LeaMex 018 SDG: 03D2057028

Client Sample ID: FS03

Date Collected: 10/27/22 12:30 Date Received: 10/27/22 16:12

Sample Depth: 24"

Analyte

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			11/01/22 13:05	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		10/31/22 10:25	10/31/22 19:36	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U *+	49.8	mg/Kg		10/31/22 10:25	10/31/22 19:36	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/31/22 10:25	10/31/22 19:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			10/31/22 10:25	10/31/22 19:36	1
o-Terphenyl	103		70 - 130			10/31/22 10:25	10/31/22 19:36	1

RL

4.99

Unit

mg/Kg

D

Prepared

Result Qualifier

39.3

Eurofins Carlsbad

Dil Fac

Surrogate Summary

Job ID: 890-3309-1 Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

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)	
890-3309-1	SS01	164 S1+	97	
890-3309-2	SS02	113	103	
890-3309-3	FS03	98	102	
890-3309-3 MS	FS03	108	104	
890-3309-3 MSD	FS03	81	90	
LCS 880-38226/1-A	Lab Control Sample	98	109	
LCSD 880-38226/2-A	Lab Control Sample Dup	90	108	
MB 880-38226/5-A	Method Blank	83	90	

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)
890-3309-1	SS01	130	119
890-3309-2	SS02	101	114
890-3309-3	FS03	94	103
890-3333-A-1-D MS	Matrix Spike	102	103
890-3333-A-1-E MSD	Matrix Spike Duplicate	102	104
LCS 880-38261/2-A	Lab Control Sample	131 S1+	146 S1+
LCSD 880-38261/3-A	Lab Control Sample Dup	133 S1+	148 S1+
MB 880-38261/1-A	Method Blank	87	99

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Carlsbad

 Client: Ensolum
 Job ID: 890-3309-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38226/5-A

Matrix: Solid Analysis Batch: 38213 -A Client Sample ID: Method Blank
Prep Type: Total/NA

Prep Batch: 38226

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:37	10/31/22 11:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:37	10/31/22 11:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:37	10/31/22 11:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/31/22 09:37	10/31/22 11:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:37	10/31/22 11:33	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		10/31/22 09:37	10/31/22 11:33	1

мв мв

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	10	0/31/22 09:37	10/31/22 11:33	1
1,4-Difluorobenzene (Surr)	90		70 - 130	1	0/31/22 09:37	10/31/22 11:33	1

Lab Sample ID: LCS 880-38226/1-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 38213

Prep Type: Total/NA Prep Batch: 38226

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1062	-	mg/Kg		106	70 - 130	
Toluene	0.100	0.08993		mg/Kg		90	70 - 130	
Ethylbenzene	0.100	0.08912		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1829		mg/Kg		91	70 - 130	
o-Xylene	0.100	0.09028		mg/Kg		90	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	98	70 - 130
1,4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: LCSD 880-38226/2-A

Matrix: Solid

Analysis Batch: 38213

Client	Sample	ID: Lab	Control	Sample	Dup

Prep Type: Total/NA

Prep Batch: 38226

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1046		mg/Kg		105	70 - 130	1	35	
Toluene	0.100	0.08779		mg/Kg		88	70 - 130	2	35	
Ethylbenzene	0.100	0.08254		mg/Kg		83	70 - 130	8	35	
m-Xylene & p-Xylene	0.200	0.1682		mg/Kg		84	70 - 130	8	35	
o-Xylene	0.100	0.08215		mg/Kg		82	70 - 130	9	35	

LCSD LCSD

Surrogate	%Recovery Qualific	er Limits
4-Bromofluorobenzene (Surr)	90	70 - 130
1.4-Difluorobenzene (Surr)	108	70 - 130

Lab Sample ID: 890-3309-3 MS

Matrix: Solid

Analysis Batch: 38213

Client Sample ID: FS03
Prep Type: Total/NA

Prep Batch: 38226

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <0.00198 U 0.0998 91 70 - 130 Benzene 0.09077 mg/Kg Toluene <0.00198 U 0.0998 0.08304 mg/Kg 83 70 - 130

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QC Sample Results

Client: Ensolum Job ID: 890-3309-1 Project/Site: LeaMex 018 SDG: 03D2057028

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

Lab Sample ID: 890-3309-3 MS **Matrix: Solid**

Analysis Batch: 38213

Client Sample ID: FS03 Prep Type: Total/NA

Prep Batch: 38226

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00198 U 0.0998 0.08672 87 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00397 UF1 0.200 0.1763 mg/Kg 88 70 - 130 0.0998 o-Xylene <0.00198 U F2 F1 0.08506 85 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-3309-3 MSD

Matrix: Solid

Analysis Batch: 38213

Client Sample ID: FS03 Prep Type: Total/NA

Prep Batch: 38226

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier %Rec RPD Limit Analyte Unit Limits 0.0990 Benzene <0.00198 U 0.06946 mg/Kg 70 70 - 130 27 35 <0.00198 U 0.0990 0.07239 73 Toluene mg/Kg 70 - 130 14 35 Ethylbenzene <0.00198 U 0.0990 0.07063 mg/Kg 71 70 - 130 20 35 0.198 0.1246 F1 70 - 130 35 m-Xylene & p-Xylene <0.00397 UF1 mg/Kg 63 34 0.0990 <0.00198 U F2 F1 0.05717 F2 F1 57 70 - 130 39 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits			
4-Bromofluorobenzene (Surr)	81		70 - 130			
1,4-Difluorobenzene (Surr)	90		70 - 130			

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

Lab Sample ID: MB 880-38261/1-A

Matrix: Solid

Analysis Batch: 38217

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38261

	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		10/31/22 10:25	10/31/22 09:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	10/31/22 10:25	10/31/22 09:53	1
o-Terphenyl	99		70 - 130	10/31/22 10:25	10/31/22 09:53	1

Lab Sample ID: LCS 880-38261/2-A

Matrix: Solid

Analysis Batch: 38217

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

Prep Batch: 38261

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	903.3		mg/Kg		90	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1384	*+	mg/Kg		138	70 - 130	
C10-C28)								

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 Client: Ensolum
 Job ID: 890-3309-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

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

Lab Sample ID: LCS 880-38261/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 38217 Prep Batch: 38261

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 131
 S1+
 70 - 130

 o-Terphenyl
 146
 S1+
 70 - 130

Lab Sample ID: LCSD 880-38261/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 38217 Prep Batch: 38261

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 944.8 94 70 - 13020 Gasoline Range Organics mg/Kg 4 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1439 *+ mg/Kg 144 70 - 13020 C10-C28)

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 133
 S1+
 70 - 130

 o-Terphenyl
 148
 S1+
 70 - 130

Lab Sample ID: 890-3333-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 38217

Sample Sample Spike MS MS %Rec

Prep Batch: 38261

Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 997 863.1 mg/Kg 85 70 - 130 (GRO)-C6-C10 <50.0 U *+ Diesel Range Organics (Over 997 1014 mg/Kg 100 70 - 130 C10-C28)

 MS
 MS

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorocotane
 102
 70 - 130

103

Lab Sample ID: 890-3333-A-1-E MSD

Client Sample ID: Matrix Spike Duplicate

70 - 130

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 38217 Prep Batch: 38261

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit <50.0 U 999 861.4 Gasoline Range Organics mg/Kg 84 70 - 130 20

 MSD MSD

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 102
 70 - 130

 o-Terphenyl
 104
 70 - 130

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o-Terphenyl

Job ID: 890-3309-1

SDG: 03D2057028

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38260/1-A

Matrix: Solid

Analysis Batch: 38377

Project/Site: LeaMex 018

Client: Ensolum

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Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/01/22 08:20

Lab Sample ID: LCS 880-38260/2-A

Matrix: Solid

Analysis Batch: 38377

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 258.0 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-38260/3-A

Matrix: Solid

Analysis Batch: 38377

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 253.4 mg/Kg 101 90 - 110

Lab Sample ID: 890-3306-A-1-C MS

Matrix: Solid

Analysis Batch: 38377

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Chloride 102 F1 250 333.0 90 - 110 mg/Kg

Lab Sample ID: 890-3306-A-1-D MSD

Matrix: Solid

Analysis Batch: 38377

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 102 F1 250 324.7 F1 mg/Kg 89 90 - 110 20

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3309-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

GC VOA

Analysis Batch: 38213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3309-1	SS01	Total/NA	Solid	8021B	38226
890-3309-2	SS02	Total/NA	Solid	8021B	38226
890-3309-3	FS03	Total/NA	Solid	8021B	38226
MB 880-38226/5-A	Method Blank	Total/NA	Solid	8021B	38226
LCS 880-38226/1-A	Lab Control Sample	Total/NA	Solid	8021B	38226
LCSD 880-38226/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38226
890-3309-3 MS	FS03	Total/NA	Solid	8021B	38226
890-3309-3 MSD	FS03	Total/NA	Solid	8021B	38226

Prep Batch: 38226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3309-1	SS01	Total/NA	Solid	5035	 :
890-3309-2	SS02	Total/NA	Solid	5035	
890-3309-3	FS03	Total/NA	Solid	5035	
MB 880-38226/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38226/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38226/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3309-3 MS	FS03	Total/NA	Solid	5035	
890-3309-3 MSD	FS03	Total/NA	Solid	5035	

Analysis Batch: 38399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3309-1	SS01	Total/NA	Solid	Total BTEX	
890-3309-2	SS02	Total/NA	Solid	Total BTEX	
890-3309-3	FS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3309-1	SS01	Total/NA	Solid	8015B NM	38261
890-3309-2	SS02	Total/NA	Solid	8015B NM	38261
890-3309-3	FS03	Total/NA	Solid	8015B NM	38261
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015B NM	38261
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38261
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38261
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38261
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38261

Prep Batch: 38261

Lab Cample ID	Client Semula ID	Duan Tuna	Matrix	Method	Duan Batab
Lab Sample ID 890-3309-1	Client Sample ID SS01	Prep Type Total/NA	Solid	8015NM Prep	Prep Batch
890-3309-2	SS02	Total/NA	Solid	8015NM Prep	
890-3309-3	FS03	Total/NA	Solid	8015NM Prep	
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3309-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

GC Semi VOA

Analysis Batch: 38394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3309-1	SS01	Total/NA	Solid	8015 NM	
890-3309-2	SS02	Total/NA	Solid	8015 NM	
890-3309-3	FS03	Total/NA	Solid	8015 NM	
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HPLC/IC

Leach Batch: 38260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3309-1	SS01	Soluble	Solid	DI Leach	
890-3309-2	SS02	Soluble	Solid	DI Leach	
890-3309-3	FS03	Soluble	Solid	DI Leach	
MB 880-38260/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3306-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3306-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38377

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3309-1	SS01	Soluble	Solid	300.0	38260
890-3309-2	SS02	Soluble	Solid	300.0	38260
890-3309-3	FS03	Soluble	Solid	300.0	38260
MB 880-38260/1-A	Method Blank	Soluble	Solid	300.0	38260
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	300.0	38260
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38260
890-3306-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	38260
890-3306-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38260

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Job ID: 890-3309-1

Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

Lab Sample ID: 890-3309-1

Matrix: Solid

Client Sample ID: SS01 Date Collected: 10/27/22 08:35 Date Received: 10/27/22 16:12

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	38226	10/31/22 09:37	MNR	EET MID
Total/NA	Analysis	8021B		200	5 mL	5 mL	38213	10/31/22 14:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38399	11/01/22 13:51	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38394	11/01/22 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	38261	10/31/22 10:25	AM	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	38217	10/31/22 19:58	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38260	10/31/22 10:21	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38377	11/01/22 11:39	CH	EET MID

Client Sample ID: SS02 Lab Sample ID: 890-3309-2

Date Collected: 10/27/22 08:55 Matrix: Solid

Date Received: 10/27/22 16:12

	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	38226	10/31/22 09:37	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	38213	10/31/22 14:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38399	11/01/22 13:51	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38394	11/01/22 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38261	10/31/22 10:25	AM	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	38217	10/31/22 20:19	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	38260	10/31/22 10:21	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38377	11/01/22 11:44	CH	EET MID

Client Sample ID: FS03 Lab Sample ID: 890-3309-3

Date Collected: 10/27/22 12:30 Date Received: 10/27/22 16:12

	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	38226	10/31/22 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38213	10/31/22 11:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38399	11/01/22 13:51	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38394	11/01/22 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	38261	10/31/22 10:25	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38217	10/31/22 19:36	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38260	10/31/22 10:21	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38377	11/01/22 11:59	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Page 15 of 21 Released to Imaging: 1/11/2023 2:28:21 PM

Matrix: Solid

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3309-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	ay morado anarytoo tor v
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Method Summary

Job ID: 890-3309-1 Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

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: LeaMex 018

Job ID: 890-3309-1

SDG: 03D2057028

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
890-3309-1	SS01	Solid	10/27/22 08:35	10/27/22 16:12	0.2
890-3309-2	SS02	Solid	10/27/22 08:55	10/27/22 16:12	0.2
890-3309-3	FS03	Solid	10/27/22 12:30	10/27/22 16:12	24"

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Chain of Custody

eurofins Environment Testing Xenco	Houston, TX Midland, TX (43 EL Paso, TX (9	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	Work Order No:	
	Hobbs, NM (5	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	www.xenco.com P	Page of
Project Manager: Nach Adams	Bill to: (if different)	0.0	omn	ents
Company Name: (NSD) (M)	Company Name:		Program: UST/PST PRP Brownfields	ds ☐ RRC ☐ Superfund ☐
Address: 8122 North Downs Hull	Address:		roject:	
ezip: Partsband.	City, State ZiP:		Reporting: Level Level PST/US	PST/UST TRRP Level IV
Phone: 8/2-5/1-5/2 Email:	ill i adamsa	was mysens (Deliverables: EDD ADaPT	Other:
Name: 10 Q M OX ()	Turn Azbujad	ANALYSIS REQUES	UEST	Preservative Codes
per: 1202057075 Manager	e Rush Code			None: NO DI Water: H ₂ O
Project Location: 27 23007-13.16221 Que Date:	50ay		Cool:	Cool: Cool MeOH: Me
Sampler's Name: JUNOLUA TA IOWATA TAT starts	TAT starts the day received to the lab, if received by 4:30pm		H,504:HC	H;SO ₄ ; H; NaOH; Na
SAMPLE RECEIPT Temp Blank: (es) No Wet lice:	Res No	j	н,рс	H,PO4:HP
Samples Received Intact: (Fest No Thermometer ID:	Param	d	Na HS	NaHSO 4: NABIS
Yes No N/A	4.50	890-3309 Chain of	Custody	Zn Acetate+NaOH: Zn
(4.6	71		NaOH+Ascorbic Acid: SAPC
Sample Identification Matrix Sampled Sampled Sampled	Depth Grab/ # of Cont	- TF		Sample Comments
10-27-2	۰2"	V V V		177-00000000
55 D2 5 16272 0655	.2 0 1	× × ×	100st	St mode: (HAIS) 5/5
15 10 20 1230	24" 0			
Total 200.7 / 6010 200.8 / 6020: 8RCRA 13 Circle Method(s) and Metal(s) to be analyzed TCLP	13PPM Texas 11 Al Sb LP/SPLP 6010: 8RCRA SI	As Ba Be B Cd Ca Cr Co Cu Fe o As Ba Be Cd Cr Co Cu Pb Mn <i>l</i>	Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Z Mo Ni Se Ag Tl U Hg: $1631/245.1/7470/7471$	n ∪ V Zn '0 / 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 lable only for the cost of samples and shall not assume any responsibility for any bases 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.	order from client company to Eurof sponsibility for any losses or expens I \$5 for each sample submitted to Eu	ins Xenco, its affiliates and subcontractors. It assigns standard ter ass incurred by the client if such losses are due to circumstances b urofins Xenco, but not analyzed. These terms will be enforced unle	rms and conditions seyond the control ess previously negotiated.	
Relipquished by: (Signature) Received by: (Signature)	ure)	Date/Time Relinquished by: (Ṣignature)	ture) Received by: (Signature)	Date/Time
* How I Amonda &	stut 101	10/27/22 10/2		
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SAMPLE

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3309-1

 SDG Number: 03D2057028

Login Number: 3309 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	

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Login Sample Receipt Checklist

Client: Ensolum Job

Job Number: 890-3309-1 SDG Number: 03D2057028

List Source: Eurofins Midland
List Number: 2
List Creation: 10/31/22 09:20 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	

202

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<6mm (1/4").

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3308-1

Laboratory Sample Delivery Group: 03D2057028

Client Project/Site: LeaMex 018

For:

💸 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Josh Adams

RAMER

Authorized for release by:

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

11/1/2022 1:53:29 PM

Have a Question?

EOL

.....LINKS

Review your project results through

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 1/11/2023 2:28:21 PM This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

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

Client: Ensolum Laboratory Job ID: 890-3308-1 Project/Site: LeaMex 018 SDG: 03D2057028

Table of Contents

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

Definitions/Glossary

Job ID: 890-3308-1 Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier **Qualifier Description** *+ LCS and/or LCSD is outside acceptance limits, high biased. S1+ Surrogate recovery exceeds control limits, high 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

Abbreviation These commonly used abbreviations may or may not be present in this report. ¤ Listed under the "D" column to designate that the result is reported on a dry weight basis %R Percent Recovery

CFL Contains Free Liquid CFU Colony Forming Unit Contains No Free Liquid **CNF** DER

Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

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

PRES Presumptive **Quality Control** QC

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-3308-1 Project/Site: LeaMex 018 SDG: 03D2057028

Job ID: 890-3308-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3308-1

Receipt

The sample was received on 10/27/2022 4:12 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS03 (890-3308-1).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS03 (890-3308-1) and (890-3303-A-2-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA

Method 8015MOD NM: The laboratory control sample (LCS) associated with preparation batch 880-38261 and analytical batch 880-38217 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

HPLC/IC

Method 300 ORGFM 28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-38260 and analytical batch 880-38377 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: 890-3308-1 Project/Site: LeaMex 018 SDG: 03D2057028

Client Sample ID: SS03 Date Collected: 10/27/22 13:30

Lab Sample ID: 890-3308-1

Matrix: Solid

Date Received: 10/27/22 16:12 Sample Depth: 0.2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/31/22 09:15	10/31/22 13:26	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/31/22 09:15	10/31/22 13:26	1
Ethylbenzene	< 0.00201	U	0.00201	mg/Kg		10/31/22 09:15	10/31/22 13:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/31/22 09:15	10/31/22 13:26	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/31/22 09:15	10/31/22 13:26	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/31/22 09:15	10/31/22 13:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	36	S1-	70 - 130			10/31/22 09:15	10/31/22 13:26	1
1,4-Difluorobenzene (Surr)	91		70 - 130			10/31/22 09:15	10/31/22 13:26	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			10/31/22 15:09	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Method: SW846 8015 NM - Diese Analyte	•	ics (DRO) ((GC)	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/01/22 13:05	Dil Fac
Analyte Total TPH	Result < 50.0	Qualifier U	RL 50.0		<u>D</u>	Prepared		
Analyte	Result <50.0 sel Range Orga	Qualifier U	RL 50.0		<u>D</u>	Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <50.0 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 50.0	mg/Kg		<u> </u>	11/01/22 13:05	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Result <50.0 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	RL	mg/Kg		Prepared	11/01/22 13:05 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 sel Range Orga Result <50.0	Qualifier U nics (DRO) Qualifier U U *+	RL 50.0 (GC) RL 50.0	mg/Kg Unit mg/Kg		Prepared 10/31/22 10:25	11/01/22 13:05 Analyzed 10/31/22 14:56	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0	Qualifier U nics (DRO) Qualifier U U *+	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg		Prepared 10/31/22 10:25 10/31/22 10:25	Analyzed 10/31/22 14:56	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 <50.0	Qualifier U nics (DRO) Qualifier U U *+	RL 50.0 (GC) RL 50.0 50.0 50.0	mg/Kg Unit mg/Kg		Prepared 10/31/22 10:25 10/31/22 10:25 10/31/22 10:25	Analyzed 10/31/22 14:56 10/31/22 14:56	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 <50.0	Qualifier U nics (DRO) Qualifier U U *+	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits	mg/Kg Unit mg/Kg		Prepared 10/31/22 10:25 10/31/22 10:25 10/31/22 10:25 Prepared	Analyzed 10/31/22 14:56 10/31/22 14:56 Analyzed Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.0	Qualifier U nics (DRO) Qualifier U U *+ U Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg		Prepared 10/31/22 10:25 10/31/22 10:25 10/31/22 10:25 Prepared 10/31/22 10:25	Analyzed 10/31/22 14:56 10/31/22 14:56 10/31/22 14:56 Analyzed 10/31/22 14:56	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U nics (DRO) Qualifier U U *+ U Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg		Prepared 10/31/22 10:25 10/31/22 10:25 10/31/22 10:25 Prepared 10/31/22 10:25	Analyzed 10/31/22 14:56 10/31/22 14:56 10/31/22 14:56 Analyzed 10/31/22 14:56	1 Dil Fac 1 1 1 1 Dil Fac 1

Surrogate Summary

Client: Ensolum Job ID: 890-3308-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3303-A-2-B MS	Matrix Spike	105	102
890-3303-A-2-C MSD	Matrix Spike Duplicate	95	95
890-3308-1	SS03	36 S1-	91
LCS 880-38223/1-A	Lab Control Sample	97	97
LCSD 880-38223/2-A	Lab Control Sample Dup	95	98
MB 880-38223/5-A	Method Blank	99	91
Surrogate Legend			
BFB = 4-Bromofluoroben:	zene (Surr)		
DFBZ = 1,4-Difluorobenzo	ene (Surr)		

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3308-1	SS03	70	77
890-3333-A-1-D MS	Matrix Spike	102	103
890-3333-A-1-E MSD	Matrix Spike Duplicate	102	104
LCS 880-38261/2-A	Lab Control Sample	131 S1+	146 S1+
LCSD 880-38261/3-A	Lab Control Sample Dup	133 S1+	148 S1+
MB 880-38261/1-A	Method Blank	87	99

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3308-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38223/5-A

Matrix: Solid Analysis Batch: 38211 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38223

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/31/22 09:15	10/31/22 11:00	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	10/31/22 09:15	10/31/22 11:00	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/31/22 09:15	10/31/22 11:00	1

Lab Sample ID: LCS 880-38223/1-A

Matrix: Solid

Analysis Batch: 38211

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38223

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08506		mg/Kg	_	85	70 - 130	
Toluene	0.100	0.09233		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.09305		mg/Kg		93	70 - 130	
m-Xylene & p-Xylene	0.200	0.1814		mg/Kg		91	70 - 130	
o-Xylene	0.100	0.1022		mg/Kg		102	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-38223/2-A

Matrix: Solid

Analyte

Benzene

Analysis Batch: 38211

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 38223

LCSD LCSD RPD %Rec Result Qualifier Unit %Rec Limits Limit 0.09133 mg/Kg 91 70 - 130 35

Toluene 0.100 0.09725 mg/Kg 97 70 - 130 5 35 Ethylbenzene 0.100 0.09938 mg/Kg 99 70 - 130 35 0.200 0.1886 m-Xylene & p-Xylene mg/Kg 94 70 - 130 35 0.100 0.1064 70 - 130 o-Xylene mg/Kg 106 35

Spike

Added

0.100

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	95	70 _ 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: 890-3303-A-2-B MS

Matrix: Solid

Analysis Batch: 38211

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

Prep Batch: 38223

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0990	0.08354		mg/Kg		83	70 - 130	
Toluene	<0.00200	U	0.0990	0.08996		mg/Kg		91	70 - 130	

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Page 7 of 19

QC Sample Results

Client: Ensolum Job ID: 890-3308-1 Project/Site: LeaMex 018 SDG: 03D2057028

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

Lab Sample ID: 890-3303-A-2-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 38211

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00200 U 0.0990 0.09006 91 70 - 130 mg/Kg m-Xylene & p-Xylene < 0.00399 0.198 0.1808 mg/Kg 91 70 - 130 0.0990 o-Xylene <0.00200 U 0.1013 70 - 130 mg/Kg 102

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-3303-A-2-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 38211

Prep Type: Total/NA

Prep Batch: 38223

Prep Batch: 38223

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.100 Benzene <0.00200 U 0.07830 mg/Kg 77 70 - 130 6 35 Toluene <0.00200 U 0.100 0.08671 mg/Kg 87 70 - 130 4 35 Ethylbenzene <0.00200 U 0.100 0.07853 mg/Kg 78 70 - 130 35 14 0.200 76 70 - 130 35 m-Xylene & p-Xylene <0.00399 U 0.1517 mg/Kg 18 <0.00200 U 0.100 0.08529 85 70 - 130 17 o-Xylene mg/Kg

MSD MSD

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

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

Lab Sample ID: MB 880-38261/1-A Client Sample ID: Method Blank **Matrix: Solid**

Analysis Batch: 38217

Prep Type: Total/NA Prep Batch: 38261

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1
C10-C28) OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepai	red	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	10/31/22	10:25	10/31/22 09:53	1
o-Terphenyl	99		70 - 130	10/31/22	10:25	10/31/22 09:53	1

Lab Sample ID: LCS 880-38261/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 38217

Prep Batch: 38261 LCS LCS Spike %Rec

Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	903.3		mg/Kg		90	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	1384	*+	mg/Kg		138	70 - 130

C10-C28)

C10-C28)

1-Chlorooctane

Job ID: 890-3308-1

Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

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

Lab Sample ID: LCS 880-38261/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 131 S1+ 70 - 130 o-Terphenyl 146 S1+ 70 - 130

Lab Sample ID: LCSD 880-38261/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 944.8 94 70 - 13020 Gasoline Range Organics mg/Kg 4 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1439 *+ mg/Kg 144 70 - 13020

LCSD LCSD Surrogate %Recovery Qualifier Limits 133 S1+ 70 - 130 1-Chlorooctane 148 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 890-3333-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 38217** Prep Batch: 38261

Sample Sample MS MS Spike Added Unit D Limits

Analyte Result Qualifier Result Qualifier %Rec Gasoline Range Organics <50.0 U 997 863.1 mg/Kg 85 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U*+ 997 1014 mg/Kg 100 70 - 130 C10-C28)

MS MS %Recovery Qualifier Surrogate Limits

102

70 - 130 o-Terphenyl 103 Lab Sample ID: 890-3333-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

70 - 130

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit <50.0 U 999 861.4 Gasoline Range Organics mg/Kg 84 70 - 130 20 (GRO)-C6-C10

Diesel Range Organics (Over <50.0 U *+ 999 1025 mg/Kg 101 70 - 130 C10-C28)

MSD MSD Qualifier Surrogate %Recovery Limits 1-Chlorooctane 102 70 - 130 104 70 - 130 o-Terphenyl

Eurofins Carlsbad

QC Sample Results

Client: Ensolum Job ID: 890-3308-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38260/1-A

Matrix: Solid

Analysis Batch: 38377

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 11/01/22 08:20

Lab Sample ID: LCS 880-38260/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38377

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 258.0 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-38260/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38377

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 253.4 mg/Kg 101 90 - 110

Lab Sample ID: 890-3306-A-1-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 38377

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Chloride 102 F1 250 333.0 90 - 110 mg/Kg

Lab Sample ID: 890-3306-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 38377

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 102 F1 250 324.7 F1 mg/Kg 89 90 - 110 20

QC Association Summary

 Client: Ensolum
 Job ID: 890-3308-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

GC VOA

Analysis Batch: 38211

Lab Sample ID 890-3308-1	Client Sample ID SS03	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 38223
MB 880-38223/5-A	Method Blank	Total/NA	Solid	8021B	38223
LCS 880-38223/1-A	Lab Control Sample	Total/NA	Solid	8021B	38223
LCSD 880-38223/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38223
890-3303-A-2-B MS	Matrix Spike	Total/NA	Solid	8021B	38223
890-3303-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38223

Prep Batch: 38223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3308-1	SS03	Total/NA	Solid	5035	
MB 880-38223/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38223/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38223/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3303-A-2-B MS	Matrix Spike	Total/NA	Solid	5035	
890-3303-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3308-1	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38217

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3308-1	SS03	Total/NA	Solid	8015B NM	38261
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015B NM	38261
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38261
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38261
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38261
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38261

Prep Batch: 38261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3308-1	SS03	Total/NA	Solid	8015NM Prep	
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3308-1	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38260

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3308-1	SS03	Soluble	Solid	DI Leach	
MB 880-38260/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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Page 11 of 19

QC Association Summary

 Client: Ensolum
 Job ID: 890-3308-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

HPLC/IC (Continued)

Leach Batch: 38260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3306-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3308-1	SS03	Soluble	Solid	300.0	38260
MB 880-38260/1-A	Method Blank	Soluble	Solid	300.0	38260
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	300.0	38260
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38260
890-3306-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	38260
890-3306-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38260

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-3308-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Client Sample ID: SS03 Lab Sample ID: 890-3308-1

Date Collected: 10/27/22 13:30 Matrix: Solid
Date Received: 10/27/22 16:12

	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	38223	10/31/22 09:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38211	10/31/22 13:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38308	10/31/22 15:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38386	11/01/22 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38261	10/31/22 10:25	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38217	10/31/22 14:56	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38260	10/31/22 10:21	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38377	11/01/22 11:34	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: 890-3308-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Laboratory: Eurofins Midland

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

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

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Method Summary

Job ID: 890-3308-1 Client: Ensolum Project/Site: LeaMex 018

SDG: 03D2057028

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: LeaMex 018

Job ID: 890-3308-1

SDG: 03D2057028

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3308-1	SS03	Solid	10/27/22 13:30	10/27/22 16:12	0.2'

re) Date/Time						
		10/27/22 10/2	tig 10/	soundas.	Atm	X
	ture) Received by: (Signature)	Date/Time Relinquished by: (Signature)	e)	Received by: (Signature)	(Signature)	Relinquished by: (Signature)
	rms and conditions syond the control ess previously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco, A minimum charge of \$85,00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	der from client company to Eurofic onsibility for any losses or expense for each sample submitted to Eu	es constitutes a valid purchase orc les and shall not assume any respo o each project and a charge of \$5	ment and relinquishment of sample be liable only for the cost of samp ncharge of \$85.00 will be applied to	tice: Signature of this docu service. Eurofins Xenco wil urofins Xenco. A minimur
or TI Sn U V Zn 1/7470 /7471	g Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn Se Ag Tl U Hg:1631/245.1/7470	A 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb M TCLP/SPLP6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni	13PPM Texas 11 AI Sb As CLP / SPLP 6010 : 8RCRA Sb A	8RCRA 13PF yzed TCLP/S	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 ircle Method(s) ar
ostance CAISOST		4			C	0000
AFF: ODDING TO		V V V	7001	3	A	という
Sample Comments			Depth Grab/ # of Cont	Date Time Sampled Sampled	fication Matrix	Sample Identification
NaOH+Ascorbic Acid: SAPC		—————————————————————————————————————	1.7	Corrected Temperature:		Total Containers:
Zn Acetate+NaOH: Zn	Chair of Custody	NO NO	8.11	Temperature Reading:	Yes No NA	Sample Custody Seals:
Na ₂ S ₂ O ₃ ; NaSO ₃		Janes-1068	U	Correction Factor:	Yes No MA	Cooler Custody Seals:
NaHSO 4: NABIS		S.	TOM-00-7	Thermometer ID:	ct: Red No	Samples Received Intact:
H ₃ PO ₄ : HP		j	No	Kee No Wet ke:	Temp Blank:	SAMPLE RECEIPT
H ₂ SO ₄ : H ₂ NaOH: Na				the lab, if rec	1	PO #:
			TAT starts the day received by	a / WMa+a TAT starts the	SC SUCCES TO	Sampler's Name:
			Code Code	Linconia.		Project Number:
None: NO OI Water: H.O			Pres		The state of	Project Name:
Preservative Codes	IEST			T	SICION COLO	
ADaPT Other:	Deliverables: EDD ADa	Meso Willywork	-	27 Email:	らくしつり	Phone:
PST/UST TRRP Level IV	Reporting: Level II Level III PST/UST		City, State ZIP:	V00,0% V	My marker	City, State ZIP:
	State of Project:		Address:	JAS HILLY		Address:
ownfields RRC Superfund	Program: UST/PST PRP Brownfields		Company Name:		Malum 11	Company Name:
Comments	Work Order Comments	0,0	Bill to: (if different)	5	MOYOU USON	Project Manager:
n Page of	www.xenco.com	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	Hobbs, NM (57			
	WOLK Older NO:	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	Midland, TX (432 EL Paso, TX (91	Xenco	Xenco	
	Work Order No.	Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300	Houston, TX (2	ment Tection		« eurorins
		Chain of Custody	Ch		C:	

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3308-1

 SDG Number: 03D2057028

Login Number: 3308
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	

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Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3308-1

 SDG Number: 03D2057028

List Source: Furofins Midland

List Source: Eurofins Midland
List Number: 2
List Creation: 10/31/22 08:40 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

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3307-1

Laboratory Sample Delivery Group: 03D2057028

Client Project/Site: LeaMex 018

For:

💸 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Josh Adams

RAMER

11/1/2022 1:53:01 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for release by:

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

.....LINKS

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 1/11/2023 2:28:21 PM This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

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

Client: Ensolum
Project/Site: LeaMex 018
Laboratory Job ID: 890-3307-1
SDG: 03D2057028

Table of Contents

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

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Definitions/Glossary

 Client: Ensolum
 Job ID: 890-3307-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

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Qualifiers

GC VOA

Qualifier Description

U Indicates the analyte was analyzed for but not detected.

Ouglifier Description

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Indicates the analyte was analyzed for but not detected.

HPLC/IC

U Indicates the analyte was analyzed for but not detected.

Glossary

LOD

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

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

Decision Level Concentration (Radiochemistry)

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)

MDC Minimum Detectable Concentration (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)

 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: LeaMex 018

Job ID: 890-3307-1

SDG: 03D2057028

Job ID: 890-3307-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3307-1

Receipt

The sample was received on 10/27/2022 4:12 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS04 (890-3307-1).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3303-A-2-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA

Method 8015MOD NM: The laboratory control sample (LCS) associated with preparation batch 880-38261 and analytical batch 880-38217 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

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: 890-3307-1 Project/Site: LeaMex 018 SDG: 03D2057028

Client Sample ID: SS04

Date Collected: 10/27/22 13:35 Date Received: 10/27/22 16:12

Sample Depth: 0.2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/31/22 09:15	10/31/22 13:05	1
Toluene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:15	10/31/22 13:05	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:15	10/31/22 13:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/31/22 09:15	10/31/22 13:05	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:15	10/31/22 13:05	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/31/22 09:15	10/31/22 13:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130			10/31/22 09:15	10/31/22 13:05	1
1,4-Difluorobenzene (Surr)	94		70 - 130			10/31/22 09:15	10/31/22 13:05	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/31/22 15:09	1
- Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	229		50.0	mg/Kg			11/01/22 13:05	1
Method: SW846 8015B NM - D	Diesel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 14:34	1
Diesel Range Organics (Over C10-C28)	168	*+	50.0	mg/Kg		10/31/22 10:25	10/31/22 14:34	1
Oll Range Organics (Over C28-C36)	60.5		50.0	mg/Kg		10/31/22 10:25	10/31/22 14:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			10/31/22 10:25	10/31/22 14:34	1
o-Terphenyl	107		70 - 130			10/31/22 10:25	10/31/22 14:34	1
-								
Method: MCAWW 300.0 - Anic	ons, Ion Chromato	ography - So	oluble					
Method: MCAWW 300.0 - Anio Analyte	•	Qualifier	oluble RL	Unit	D	Prepared	Analyzed	Dil Fac

Surrogate Summary

Client: Ensolum Job ID: 890-3307-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Sur	ırrogate F
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
890-3303-A-2-B MS	Matrix Spike	105	102		
890-3303-A-2-C MSD	Matrix Spike Duplicate	95	95		
890-3307-1	SS04	129	94		
LCS 880-38223/1-A	Lab Control Sample	97	97		
LCSD 880-38223/2-A	Lab Control Sample Dup	95	98		
MB 880-38223/5-A	Method Blank	99	91		
Surrogate Legend					
BFB = 4-Bromofluorobenz	zene (Surr)				
DFBZ = 1,4-Difluorobenze	ene (Surr)				

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3307-1	SS04	100	107
890-3333-A-1-D MS	Matrix Spike	102	103
890-3333-A-1-E MSD	Matrix Spike Duplicate	102	104
LCS 880-38261/2-A	Lab Control Sample	131 S1+	146 S1+
LCSD 880-38261/3-A	Lab Control Sample Dup	133 S1+	148 S1+
MB 880-38261/1-A	Method Blank	87	99

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3307-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38223/5-A

Lab Sample ID: LCS 880-38223/1-A

Lab Sample ID: LCSD 880-38223/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 38211

Matrix: Solid Analysis Batch: 38211 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38223

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/31/22 09:15	10/31/22 11:00	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	d Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	10/31/22 09):15 10/31/22 11:00	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/31/22 09):15 10/31/22 11:00	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38223

Analysis Batch: 38211 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08506 mg/Kg 85 70 - 130 Toluene 0.100 0.09233 mg/Kg 92 70 - 130 0.100 0.09305 93 Ethylbenzene mg/Kg 70 - 130 0.200 0.1814 91 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.1022 70 - 130 o-Xylene mg/Kg 102

LCS LCS

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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 38223

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09133		mg/Kg		91	70 - 130	7	35
Toluene	0.100	0.09725		mg/Kg		97	70 - 130	5	35
Ethylbenzene	0.100	0.09938		mg/Kg		99	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130	4	35
o-Xylene	0.100	0.1064		mg/Kg		106	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: 890-3303-A-2-B MS

Matrix: Solid

Analysis Batch: 38211

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

Prep Batch: 38223

_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0990	0.08354		mg/Kg		83	70 - 130	
Toluene	<0.00200	U	0.0990	0.08996		mg/Kg		91	70 - 130	

Prep Type: Total/NA

Prep Batch: 38223

QC Sample Results

Client: Ensolum Job ID: 890-3307-1 Project/Site: LeaMex 018 SDG: 03D2057028

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

Lab Sample ID: 890-3303-A-2-B MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 38211

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U	0.0990	0.09006		mg/Kg		91	70 - 130	
m-Xylene & p-Xylene	<0.00399	U	0.198	0.1808		mg/Kg		91	70 - 130	
o-Xylene	<0.00200	U	0.0990	0.1013		mg/Kg		102	70 - 130	

MS MS

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-3303-A-2-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 38211

							Prep Type: Tota			
							Pre	Batch:	38223	
Sample	Spike	MSD	MSD				%Rec		RPD	
Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	

Sample Sa Result Q Analyte 0.100 0.07830 Benzene <0.00200 U mg/Kg 77 70 - 130 35 Toluene <0.00200 U 0.100 0.08671 70 - 130 35 mg/Kg 87 4 Ethylbenzene <0.00200 U 0.100 0.07853 mg/Kg 78 70 - 130 35 14 m-Xylene & p-Xylene <0.00399 U 0.200 0.1517 76 70 - 130 35 mg/Kg 18 0.100 o-Xylene <0.00200 U 0.08529 85 70 - 130 mg/Kg 17

MSD MSD

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

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

Lab Sample ID: MB 880-38261/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Prep Batch: 38261

Analysis Batch: 38217

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	10/31/22 10:25	10/31/22 09:53	1
o-Terphenyl	99		70 - 130	10/31/22 10:25	10/31/22 09:53	1

Lab Sample ID: LCS 880-38261/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

	Spike	LUS	LUS				70 KeC
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	903.3		mg/Kg		90	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	1384	*+	mg/Kg		138	70 - 130
C10-C28)							

Job ID: 890-3307-1

SDG: 03D2057028

Prep Type: Total/NA

Prep Batch: 38261

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

Lab Sample ID: LCS 880-38261/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Analysis Batch: 38217

Client: Ensolum

Project/Site: LeaMex 018

LCS LCS Surrogate %Recovery Qualifier Limits

1-Chlorooctane 131 S1+ 70 - 130 o-Terphenyl 146 S1+ 70 - 130

Lab Sample ID: LCSD 880-38261/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 944.8 94 70 - 13020 Gasoline Range Organics mg/Kg 4 (GRO)-C6-C10

1439 *+

mg/Kg

144

70 - 130

1000

C10-C28)

Diesel Range Organics (Over

LCSD LCSD Surrogate %Recovery Qualifier Limits 133 S1+ 70 - 130 1-Chlorooctane 148 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 890-3333-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA **Analysis Batch: 38217** Prep Batch: 38261

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

Analyte Gasoline Range Organics <50.0 U 997 863.1 mg/Kg 85 70 - 130 (GRO)-C6-C10 <50.0 U *+ Diesel Range Organics (Over 997 1014 mg/Kg 100 70 - 130

C10-C28)

o-Terphenyl

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

103

Lab Sample ID: 890-3333-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

70 - 130

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 38217 Prep Batch: 38261 Sample Sample MSD MSD RPD Spike %Rec

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit <50.0 U 999 861.4 Gasoline Range Organics mg/Kg 84 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U *+ 999 1025 mg/Kg 101 70 - 130 20

C10-C28)

MSD MSD Qualifier Surrogate %Recovery Limits 1-Chlorooctane 102 70 - 130 104 70 - 130 o-Terphenyl

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QC Sample Results

Client: Ensolum Job ID: 890-3307-1 Project/Site: LeaMex 018

SDG: 03D2057028

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38260/1-A **Matrix: Solid**

Lab Sample ID: LCS 880-38260/2-A

Client Sample ID: Method Blank

Prep Type: Soluble

Analysis Batch: 38377

мв мв

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/01/22 08:20

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analysis Batch: 38377

Matrix: Solid

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 258.0 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-38260/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Soluble

Analysis Batch: 38377

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 253.4 101 mg/Kg 90 - 110

Lab Sample ID: 880-20979-A-3-B MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble

Analysis Batch: 38377 MS MS Sample Sample Spike

%Rec Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits Chloride 21.9 250 294.9 109 90 - 110 mg/Kg

Lab Sample ID: 880-20979-A-3-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38377

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 250 Chloride 21.9 293.2 mg/Kg 109 90 - 110 20

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3307-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

GC VOA

Analysis Batch: 38211

Lab Sample ID 890-3307-1	Client Sample ID SS04	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 38223
MB 880-38223/5-A	Method Blank	Total/NA	Solid	8021B	38223
LCS 880-38223/1-A	Lab Control Sample	Total/NA	Solid	8021B	38223
LCSD 880-38223/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38223
890-3303-A-2-B MS	Matrix Spike	Total/NA	Solid	8021B	38223
890-3303-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38223

Prep Batch: 38223

Lab Sample ID 890-3307-1	Client Sample ID SS04	Prep Type Total/NA	Matrix Solid	Method 5035	Prep Batch
MB 880-38223/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38223/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38223/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3303-A-2-B MS	Matrix Spike	Total/NA	Solid	5035	
890-3303-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3307-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3307-1	SS04	Total/NA	Solid	8015B NM	38261
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015B NM	38261
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38261
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38261
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38261
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38261

Prep Batch: 38261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3307-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3307-1	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3307-1	SS04	Soluble	Solid	DI Leach	
MB 880-38260/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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Page 11 of 19

QC Association Summary

 Client: Ensolum
 Job ID: 890-3307-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

HPLC/IC (Continued)

Leach Batch: 38260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20979-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-20979-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3307-1	SS04	Soluble	Solid	300.0	38260
MB 880-38260/1-A	Method Blank	Soluble	Solid	300.0	38260
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	300.0	38260
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38260
880-20979-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	38260
880-20979-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38260

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-3307-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Client Sample ID: SS04 Lab Sample ID: 890-3307-1

Date Collected: 10/27/22 13:35
Date Received: 10/27/22 16:12

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	38223	10/31/22 09:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38211	10/31/22 13:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38307	10/31/22 15:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38385	11/01/22 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38261	10/31/22 10:25	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38217	10/31/22 14:34	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38260	10/31/22 10:21	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38377	11/01/22 12:58	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: 890-3307-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Laboratory: Eurofins Midland

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

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

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Method Summary

 Client: Ensolum
 Job ID: 890-3307-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

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

Protocol References:

DI Leach

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Deionized Water Leaching Procedure

Laboratory References:

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

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EET MID

ASTM

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Sample Summary

Client: Ensolum

Job ID: 890-3307-1

Project/Site: LeaMex 018 SDG: 03D2057028

Lab Sample ID Client Sample ID Matrix Collected Received Depth 890-3307-1 SS04 Solid 10/27/22 13:35 10/27/22 16:12 0.2'

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

Total 200.7 / 6010

200.8 / 6020:

service. Eurofins Xenco will be liable only for the cost of samples and shall r tice: Signature of this document and relinquishment of samples constitutes

Relinquished by: (Signature)

when all

eurofins

Xenco

Environment Testing

Phone:

City, State ZIP: Address: Company Name: Project Manager:

SAMPLE RECEIPT

Temp Blank: res No

Sampler's Name:

roject Location:

Project Number:

Project Name:

James ()

Cooler Custody Seals:

Yes No MA Yes No

Total Containers: Sample Custody Seals:

Sample Identification

Matrix

199

Samples Received Intact:

13 14

Chain of Custody

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

Work Order No:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn U V allyzed TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631/245.1/7470 /747 les constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions ples 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 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 regotilated. Received by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature)	Depth Grab # of Comp Cont Cont Comp Cont Cont Cont Cont Cont Cont Cont Cont	Turn Around Pres. ANALYSIS REQUEST Preserv	Deliverables: EDD ADAPT L	Reporting: Level III Level III	Company Name: Program: USI/PSI PRP Brownhelds KI	On C Work Order Comments	www.xenco.com Page
7470 / 7	a: NABIS a: NASO 3 a: NASO 3 bold a: (b)	Preservative Codes None: NO DI Water: H ₂ O		PST/UST []	RRC Superrund		

Revised Date 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3307-1 SDG Number: 03D2057028

Login Number: 3307 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: 890-3307-1 SDG Number: 03D2057028

List Source: Eurofins Midland

Login Number: 3307 List Number: 2 List Creation: 10/31/22 08:40 AM

Creator: Rodriguez, Leticia

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



Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3306-1

Laboratory Sample Delivery Group: 03D2057028

Client Project/Site: LeaMex 018

For:

💸 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Josh Adams



Authorized for release by: 11/1/2022 1:53:01 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

EOL **Have a Question?**

.....LINKS

Review your project results through

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 1/11/2023 2:28:21 PM

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

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

Released to Imaging: 1/11/2023 2:28:21 PM

Client: Ensolum
Project/Site: LeaMex 018
Laboratory Job ID: 890-3306-1
SDG: 03D2057028

Table of Contents

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

Definitions/Glossary

 Client: Ensolum
 Job ID: 890-3306-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

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Qualifiers

GC VOA

Qualifier Description

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit

MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limi
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: LeaMex 018

Job ID: 890-3306-1 SDG: 03D2057028

Job ID: 890-3306-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3306-1

Receipt

The sample was received on 10/27/2022 4:12 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS05 (890-3306-1).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3303-A-2-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-38261 and analytical batch 880-38217 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-38260 and analytical batch 880-38377 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: 890-3306-1 Project/Site: LeaMex 018 SDG: 03D2057028

Client Sample ID: SS05

Lab Sample ID: 890-3306-1 Date Collected: 10/27/22 13:40

Date Received: 10/27/22 16:12

Matrix: Solid

Sample Depth: 0.2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/31/22 09:15	10/31/22 12:44	1
Toluene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:15	10/31/22 12:44	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:15	10/31/22 12:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/31/22 09:15	10/31/22 12:44	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:15	10/31/22 12:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/31/22 09:15	10/31/22 12:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			10/31/22 09:15	10/31/22 12:44	1
1,4-Difluorobenzene (Surr)	104		70 - 130			10/31/22 09:15	10/31/22 12:44	1
Method: TAL SOP Total BTEX - T	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/31/22 15:09	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) ((GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0		50.0	mg/Kg	— <u> </u>		11/01/22 13:05	1
Mothed: CW04C 004ED NM Dies	nal Damas Over	rice (DDO)	(00)					
Method: SW846 8015B NM - Dies Analyte	•	Qualifier	(GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0		50.0	mg/Kg		10/31/22 10:25	10/31/22 14:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0	mg/Kg		10/31/22 10:25	10/31/22 14:12	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 14:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130			10/31/22 10:25	10/31/22 14:12	1
o-Terphenyl	99		70 - 130			10/31/22 10:25	10/31/22 14:12	1
Method: MCAWW 300.0 - Anions	s, Ion Chromato	ography - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	102	F1	5.00	mg/Kg			11/01/22 11:14	

Surrogate Summary

 Client: Ensolum
 Job ID: 890-3306-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3303-A-2-B MS	Matrix Spike	105	102
890-3303-A-2-C MSD	Matrix Spike Duplicate	95	95
890-3306-1	SS05	106	104
LCS 880-38223/1-A	Lab Control Sample	97	97
LCSD 880-38223/2-A	Lab Control Sample Dup	95	98
MB 880-38223/5-A	Method Blank	99	91
Surrogate Legend			
BFB = 4-Bromofluorobenz	zene (Surr)		
DFBZ = 1,4-Difluorobenze	ene (Surr)		

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3306-1	SS05	85	99
890-3333-A-1-D MS	Matrix Spike	102	103
890-3333-A-1-E MSD	Matrix Spike Duplicate	102	104
LCS 880-38261/2-A	Lab Control Sample	131 S1+	146 S1+
LCSD 880-38261/3-A	Lab Control Sample Dup	133 S1+	148 S1+
MB 880-38261/1-A	Method Blank	87	99

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Ensolum Job ID: 890-3306-1 SDG: 03D2057028 Project/Site: LeaMex 018

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38223/5-A

Matrix: Solid Analysis Batch: 38211 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38223

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:15	10/31/22 11:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/31/22 09:15	10/31/22 11:00	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	10/31/22 09:15	10/31/22 11:00	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/31/22 09:15	10/31/22 11:00	1

Lab Sample ID: LCS 880-38223/1-A

Matrix: Solid

Analysis Batch: 38211

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38223

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08506		mg/Kg		85	70 - 130	
Toluene	0.100	0.09233		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.09305		mg/Kg		93	70 - 130	
m-Xylene & p-Xylene	0.200	0.1814		mg/Kg		91	70 - 130	
o-Xylene	0.100	0.1022		mg/Kg		102	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-38223/2-A

Matrix: Solid

Analysis Batch: 38211

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38223

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09133		mg/Kg		91	70 - 130	7	35
Toluene	0.100	0.09725		mg/Kg		97	70 - 130	5	35
Ethylbenzene	0.100	0.09938		mg/Kg		99	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130	4	35
o-Xylene	0.100	0.1064		mg/Kg		106	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	95	70 _ 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: 890-3303-A-2-B MS

Matrix: Solid

Analysis Batch: 38211

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

Prep Batch: 38223

_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0990	0.08354		mg/Kg	_	83	70 - 130	
Toluene	<0.00200	U	0.0990	0.08996		mg/Kg		91	70 - 130	

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Page 7 of 19

QC Sample Results

Client: Ensolum Job ID: 890-3306-1 Project/Site: LeaMex 018 SDG: 03D2057028

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

Lab Sample ID: 890-3303-A-2-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 38211

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00200	U	0.0990	0.09006		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.198	0.1808		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.0990	0.1013		mg/Kg		102	70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-3303-A-2-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 38211

Prep Type: Total/NA

Prep Batch: 38223

Prep Batch: 38223

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.100 Benzene <0.00200 U 0.07830 mg/Kg 77 70 - 130 6 35 Toluene 87 70 - 130 <0.00200 U 0.100 0.08671 mg/Kg 4 35 Ethylbenzene <0.00200 U 0.100 0.07853 mg/Kg 78 70 - 130 35 14 <0.00399 U 0.200 0.1517 76 70 - 130 35 m-Xylene & p-Xylene mg/Kg 18 0.100 <0.00200 U 0.08529 85 70 - 130 17 o-Xylene mg/Kg

MSD MSD

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

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

Lab Sample ID: MB 880-38261/1-A Client Sample ID: Method Blank **Matrix: Solid**

Analysis Batch: 38217

The state of the s
Prep Type: Total/NA
Prep Batch: 38261

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	10/31/22 10:25	10/31/22 09:53	1
o-Terphenyl	99		70 - 130	10/31/22 10:25	10/31/22 09:53	1

Lab Sample ID: LCS 880-38261/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 38217 Prep Batch: 38261

	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	903.3		mg/Kg		90	70 - 130		
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1384	*+	mg/Kg		138	70 - 130		
C10-C28)									

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Job ID: 890-3306-1

Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

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

Lab Sample ID: LCS 880-38261/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 38217 Prep Batch: 38261

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 131 S1+ 70 - 130 o-Terphenyl 146 S1+ 70 - 130

Lab Sample ID: LCSD 880-38261/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 944.8 94 70 - 13020 Gasoline Range Organics mg/Kg 4

(GRO)-C6-C10 Diesel Range Organics (Over 1000 1439 *+ mg/Kg 144 70 - 13020 C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 133 S1+ 70 - 130 1-Chlorooctane 148 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 890-3333-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 38217 Prep Batch: 38261 Sample Sample MS MS Spike

Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 997 863.1 mg/Kg 85 70 - 130 (GRO)-C6-C10 <50.0 U *+ Diesel Range Organics (Over 997 1014 mg/Kg 100 70 - 130

C10-C28)

70 - 130

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

103

Lab Sample ID: 890-3333-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit <50.0 U 999 861.4 Gasoline Range Organics mg/Kg 84 70 - 130 20

(GRO)-C6-C10 Diesel Range Organics (Over <50.0 U *+ 999 1025 mg/Kg 101 70 - 130 20 C10-C28)

MSD MSD Qualifier Surrogate %Recovery Limits 1-Chlorooctane 102 70 - 130 104 70 - 130 o-Terphenyl

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o-Terphenyl

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

%Rec

Limits

90 - 110

Client Sample ID: Lab Control Sample Dup

%Rec

103

D

mg/Kg

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: SS05

Client Sample ID: SS05

Prep Type: Soluble

Prep Type: Soluble

QC Sample Results

Client: Ensolum Job ID: 890-3306-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38260/1-A

Matrix: Solid

Analysis Batch: 38377

MB MB

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/01/22 08:20

258.0

Lab Sample ID: LCS 880-38260/2-A

Matrix: Solid

Chloride

Analysis Batch: 38377

Spike LCS LCS Added Analyte Result Qualifier Unit

Lab Sample ID: LCSD 880-38260/3-A

Matrix: Solid

Analysis Batch: 38377

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 253.4 90 - 110 mg/Kg 101

250

Lab Sample ID: 890-3306-1 MS

Matrix: Solid

Analysis Batch: 38377

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 102 F1 250 333.0 93 90 - 110 mg/Kg

Lab Sample ID: 890-3306-1 MSD

Matrix: Solid

Analysis Batch: 38377

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 102 F1 250 324.7 F1 mg/Kg 89 90 - 110 20

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QC Association Summary

Client: Ensolum Job ID: 890-3306-1 Project/Site: LeaMex 018 SDG: 03D2057028

GC VOA

Analysis Batch: 38211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1	SS05	Total/NA	Solid	8021B	38223
MB 880-38223/5-A	Method Blank	Total/NA	Solid	8021B	38223
LCS 880-38223/1-A	Lab Control Sample	Total/NA	Solid	8021B	38223
LCSD 880-38223/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38223
890-3303-A-2-B MS	Matrix Spike	Total/NA	Solid	8021B	38223
890-3303-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38223

Prep Batch: 38223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1	SS05	Total/NA	Solid	5035	
MB 880-38223/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38223/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38223/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3303-A-2-B MS	Matrix Spike	Total/NA	Solid	5035	
890-3303-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1	SS05	Total/NA	Solid	8015B NM	38261
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015B NM	38261
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38261
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38261
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38261
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38261

Prep Batch: 38261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1	SS05	Total/NA	Solid	8015NM Prep	
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1	SS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38260

Released to Imaging: 1/11/2023 2:28:21 PM

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1	SS05	Soluble	Solid	DI Leach	
MB 880-38260/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3306-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

HPLC/IC (Continued)

Leach Batch: 38260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1 MS	SS05	Soluble	Solid	DI Leach	
890-3306-1 MSD	SS05	Soluble	Solid	DI Leach	

Analysis Batch: 38377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-1	SS05	Soluble	Solid	300.0	38260
MB 880-38260/1-A	Method Blank	Soluble	Solid	300.0	38260
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	300.0	38260
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38260
890-3306-1 MS	SS05	Soluble	Solid	300.0	38260
890-3306-1 MSD	SS05	Soluble	Solid	300.0	38260

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-3306-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Client Sample ID: SS05

Lab Sample ID: 890-3306-1

Date Collected: 10/27/22 13:40
Date Received: 10/27/22 16:12

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	38223	10/31/22 09:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38211	10/31/22 12:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38306	10/31/22 15:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38384	11/01/22 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38261	10/31/22 10:25	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38217	10/31/22 14:12	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38260	10/31/22 10:21	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38377	11/01/22 11:14	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: 890-3306-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

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	NE	ELAP	T104704400-22-24	06-30-23	
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w	
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v	
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	ay morado anarytoo tor v	
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EET MID

ASTM

Method Summary

 Client: Ensolum
 Job ID: 890-3306-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

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

Protocol References:

DI Leach

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Deionized Water Leaching Procedure

Laboratory References:

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

Eurofins Carlsbad

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Sample Summary

Client: Ensolum

Project/Site: LeaMex 018

Job ID: 890-3306-1

SDG: 03D2057028

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3306-1	SS05	Solid	10/27/22 13:40	10/27/22 16:12	0.2'

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Chain of Custody

		1	(6/2/19)	al high	an some		2
gnature) Date/Time	sture) Received by: (Signature)	me Relinquished by: (Signature	Date/Time	Received by (Signature)	Received	y: (Signature)	Relinquished by: (Signature)
	erms and conditions beyond the control less previously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such bases 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	ny to Eurofins Xenco, it s or expenses incurred nitted to Eurofins Xenc	valid purchase order from client compa : assume any responsibility for any losse and a charge of \$5 for each sample sub	ent of samples constitutes a cost of samples and shall not be applied to each project a	xument and relinquishme will be liable only for the c rum charge of \$85.00 will	e: Signature of this do vice. Eurofins Xenco rofins Xenco. A minin
Ag SiO ₂ Na Sr Tl Sn U V Zn Hg: 1631 / 245.1 / 7470 / 7471	Vin Mo Ni K Se Ag Ti U	A 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg I TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se	Al Sb As Ba CRA Sb As Ba	8RCRA 13PPM Texas 11 TCLP/SPLP 6010: 8R		Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 rcle Method(s) ar
12 (181823)			~	1340 .2" C	5 10-21-22		505
Sample Comments			Cont	Time Depth Comp	Matrix Date Sampled	itification	Sample Identification
An Acetate+NaUH: Zn NaOH+Ascorbic Acid: SAPC	nain of Custody	890-3306 Chain	14	Temperature Reading: 4 - 8 Corrected Temperature: 4 - 6	Corrected Temperature	ls: Yes No	Sample Custody Seals: Total Containers:
Na ₂ S ₂ O ₃ : NaSO ₃		id	Para	actor: 1010	No Thermometer ID: NIA Correction Factor:	Yes No	Samples Received Intact: Cooler Custody Seals:
H ₃ PO ₄ : HP		S	meters	et ice:		Temp i	SAMPLE RECEIPT
HCL: HC HNO 3: HN H ₂ SO 4: H ₂ NaOH: Na				the lab, if receiv	Falcome	Dirigina	Sampler's Name: PO #:
			Code		1-103/6/234	27.530lpg	Project Location:
Preservative Codes	UEST	ANALYSIS REQUES	Pres.	Turn Around	300	Leanex	Project Name:
AUAPI L. Other:	TO COM THE TOTAL POOR	ELPAIMITTOWN METAMINES PAR	Ta a	Email: O.O. O.M	15/27	365	Phone:
SI		-		OZO O City, State ZIP:	SS WIN TO	Carlsh	City, State ZIP:
	State of Project:			55 HULL Address:	North Park	8127	Address:
☐ Brownfields ☐ RRC ☐ Superfund ☐	Program: UST/PST ☐ PRP☐ Brownfields ☐		Ü	Company Name:	J17.Wm	6 ASO	Company Name:
Work Order Comments	Work Or	Q	Ont)	Bill to: (if different)	ADAMO	HSON	Project Manager:
co.com Page of O	www.xenco.com	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	aso, TX (915) 585-34 bs, NM (575) 392-75	EL P	Xenco	×	
r No:	Work Order No:	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	nd, TX (432) 704-544			!	

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3306-1

 SDG Number: 03D2057028

Login Number: 3306 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	

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Login Sample Receipt Checklist

Client: Ensolum Job Numb

Job Number: 890-3306-1 SDG Number: 03D2057028

Login Number: 3306
List Source: Eurofins Midland
List Number: 2
List Creation: 10/31/22 08:40 AM

Creator: Rodriguez, Leticia

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

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Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3310-1

Laboratory Sample Delivery Group: 03D2057028

Client Project/Site: LeaMex 018

For:

💸 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Josh Adams

SKRAMER

Authorized for release by: 11/1/2022 1:54:02 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for releas

Ask—The Expert

EOL

Have a Question?

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Review your project results through

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www.eurofinsus.com/Env
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signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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

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Client: Ensolum
Project/Site: LeaMex 018
Laboratory Job ID: 890-3310-1
SDG: 03D2057028

Table of Contents

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

Definitions/Glossary

Job ID: 890-3310-1 Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

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** *+ LCS and/or LCSD is outside acceptance limits, high biased. S1+ Surrogate recovery exceeds control limits, high 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

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

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

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**

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

Eurofins Carlsbad

Case Narrative

Client: Ensolum

Project/Site: LeaMex 018

Job ID: 890-3310-1 SDG: 03D2057028

Job ID: 890-3310-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3310-1

Receipt

The sample was received on 10/27/2022 4:11 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS06 (890-3310-1).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38226 and analytical batch 880-38213 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 laboratory control sample (LCS) associated with preparation batch 880-38261 and analytical batch 880-38217 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-38260 and analytical batch 880-38377 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: 890-3310-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Client Sample ID: SS06

Lab Sample ID: 890-3310-1

Date Collected: 10/27/22 13:45 Date Received: 10/27/22 16:11 Matrix: Solid

Sample Depth: 0.2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/31/22 09:37	10/31/22 12:15	1
Toluene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:37	10/31/22 12:15	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:37	10/31/22 12:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/31/22 09:37	10/31/22 12:15	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/31/22 09:37	10/31/22 12:15	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/31/22 09:37	10/31/22 12:15	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	90		70 - 130			10/31/22 09:37	10/31/22 12:15	1
1,4-Difluorobenzene (Surr)	87		70 - 130			10/31/22 09:37	10/31/22 12:15	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/01/22 13:51	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/01/22 13:05	1
- Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/31/22 10:25	10/31/22 15:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U *+	49.9	mg/Kg		10/31/22 10:25	10/31/22 15:17	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/31/22 10:25	10/31/22 15:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			10/31/22 10:25	10/31/22 15:17	
o-Terphenyl	91		70 - 130			10/31/22 10:25	10/31/22 15:17	1
Method: MCAWW 300.0 - Anions	s, Ion Chromato	ography - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.6		4.96	mg/Kg			11/01/22 12:04	

Surrogate Summary

Client: Ensolum Job ID: 890-3310-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surroga
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3309-A-3-B MS	Matrix Spike	108	104	
890-3309-A-3-C MSD	Matrix Spike Duplicate	81	90	
890-3310-1	SS06	90	87	
LCS 880-38226/1-A	Lab Control Sample	98	109	
LCSD 880-38226/2-A	Lab Control Sample Dup	90	108	
MB 880-38226/5-A	Method Blank	83	90	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluorobenz	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limi	
		1001	OTPH1		
ab Sample ID	Client Sample ID	(70-130)	(70-130)		
90-3310-1	SS06	80	91		
90-3333-A-1-D MS	Matrix Spike	102	103		
90-3333-A-1-E MSD	Matrix Spike Duplicate	102	104		
CS 880-38261/2-A	Lab Control Sample	131 S1+	146 S1+		
CSD 880-38261/3-A	Lab Control Sample Dup	133 S1+	148 S1+		
1B 880-38261/1-A	Method Blank	87	99		

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Carlsbad

Client: Ensolum Job ID: 890-3310-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38226/5-A

Lab Sample ID: LCS 880-38226/1-A

Matrix: Solid

Analysis Batch: 38213

Matrix: Solid Analysis Batch: 38213 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38226

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:37	10/31/22 11:33	•
Toluene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:37	10/31/22 11:33	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:37	10/31/22 11:33	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/31/22 09:37	10/31/22 11:33	
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/31/22 09:37	10/31/22 11:33	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/31/22 09:37	10/31/22 11:33	

MB MB

Surrogate	%Recovery	Qualifier	Limits	P	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	10/3	1/22 09:37	10/31/22 11:33	1
1,4-Difluorobenzene (Surr)	90		70 - 130	10/3	1/22 09:37	10/31/22 11:33	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38226

Prep Type: Total/NA

Prep Batch: 38226

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1062 mg/Kg 106 70 - 130 Toluene 0.100 0.08993 mg/Kg 90 70 - 130 0.100 0.08912 Ethylbenzene mg/Kg 89 70 - 130 0.200 0.1829 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09028 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	98	70 - 130
1,4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: LCSD 880-38226/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Solid

Analysis Batch: 38213

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1046		mg/Kg		105	70 - 130	1	35
Toluene	0.100	0.08779		mg/Kg		88	70 - 130	2	35
Ethylbenzene	0.100	0.08254		mg/Kg		83	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1682		mg/Kg		84	70 - 130	8	35
o-Xylene	0.100	0.08215		mg/Kg		82	70 - 130	9	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1.4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-3309-A-3-B MS

Matrix: Solid

Analysis Batch: 38213

Clien	t Sample	e ID: I	Matrix	x Spik	e
	Dro	an Tv	no: T	otal/N	Δ

Prep Batch: 38226

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U	0.0998	0.09077		mg/Kg		91	70 - 130	
Toluene	<0.00198	U	0.0998	0.08304		mg/Kg		83	70 - 130	

Eurofins Carlsbad

QC Sample Results

Client: Ensolum Job ID: 890-3310-1 Project/Site: LeaMex 018 SDG: 03D2057028

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

Lab Sample ID: 890-3309-A-3-B MS

Matrix: Solid Analysis Batch: 38213

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 0.0998 Ethylbenzene <0.00198 U 0.08672 87 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00397 UF1 0.200 0.1763 mg/Kg 88 70 - 130 0.0998 o-Xylene <0.00198 U F2 F1 0.08506 85 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery Qualif	ier Limits
4-Bromofluorobenzene (Surr)	108	70 - 130
1,4-Difluorobenzene (Surr)	104	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38226

Prep Batch: 38226

Analysis Batch: 38213

Matrix: Solid

Lab Sample ID: 890-3309-A-3-C MSD

Sample Sample Spike MSD MSD RPD Result Qualifier Result Qualifier RPD Limit Analyte babbA Unit %Rec Limits 0.0990 Benzene <0.00198 U 0.06946 mg/Kg 70 70 - 130 27 35 <0.00198 U 0.07239 Toluene 0.0990 mg/Kg 73 70 - 130 14 35 Ethylbenzene <0.00198 U 0.0990 0.07063 mg/Kg 71 70 - 130 20 35 0.198 70 - 130 35 m-Xylene & p-Xylene <0.00397 UF1 0.1246 F1 mg/Kg 63 34 0.0990 <0.00198 U F2 F1 0.05717 F2 F1 57 70 - 130 39 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery Qua	alifier Limits
4-Bromofluorobenzene (Surr)	81	70 - 130
1,4-Difluorobenzene (Surr)	90	70 - 130

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

Lab Sample ID: MB 880-38261/1-A

Matrix: Solid

Analysis Batch: 38217

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38261

	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		10/31/22 10:25	10/31/22 09:53	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/31/22 10:25	10/31/22 09:53	1	

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	10/31/22 10:25	10/31/22 09:53	1
o-Terphenyl	99		70 - 130	10/31/22 10:25	10/31/22 09:53	1

Lab Sample ID: LCS 880-38261/2-A

Matrix: Solid

Analysis Batch: 38217

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 38261

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	903.3		mg/Kg		90	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1384	*+	mg/Kg		138	70 - 130	
C10-C28)								

Job ID: 890-3310-1 Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

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

Lab Sample ID: LCS 880-38261/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 131 S1+ 70 - 130 o-Terphenyl 146 S1+ 70 - 130

Lab Sample ID: LCSD 880-38261/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 944.8 94 70 - 13020 Gasoline Range Organics mg/Kg 4 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1439 *+ mg/Kg 144 70 - 13020 C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 133 S1+ 70 - 130 1-Chlorooctane 148 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 890-3333-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 38217** Prep Batch: 38261

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 997 863.1 mg/Kg 85 70 - 130

(GRO)-C6-C10 <50.0 U *+ Diesel Range Organics (Over 997 1014 mg/Kg 100 70 - 130 C10-C28)

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

103

Lab Sample ID: 890-3333-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38217 Prep Batch: 38261

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit <50.0 U 999 861.4 Gasoline Range Organics mg/Kg 84 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U *+ 999 1025 mg/Kg 101 70 - 130 20

MSD MSD Qualifier Surrogate %Recovery Limits 1-Chlorooctane 102 70 - 130 104 70 - 130 o-Terphenyl

Eurofins Carlsbad

o-Terphenyl

C10-C28)

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

QC Sample Results

Client: Ensolum Job ID: 890-3310-1 Project/Site: LeaMex 018 SDG: 03D2057028

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38260/1-A

Matrix: Solid

Analysis Batch: 38377

Prep Type: Soluble

MB MB Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/01/22 08:20

Lab Sample ID: LCS 880-38260/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38377

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 258.0 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-38260/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38377

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 253.4 mg/Kg 101 90 - 110

Lab Sample ID: 890-3306-A-1-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 38377

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Chloride 102 F1 250 333.0 90 - 110 mg/Kg

Lab Sample ID: 890-3306-A-1-D MSD

Matrix: Solid

Analysis Batch: 38377

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 102 F1 250 324.7 F1 mg/Kg 89 90 - 110 20

QC Association Summary

Client: Ensolum Job ID: 890-3310-1 Project/Site: LeaMex 018 SDG: 03D2057028

GC VOA

Analysis Batch: 38213

Lab Sample ID 890-3310-1	Client Sample ID SS06	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 38226
MB 880-38226/5-A	Method Blank	Total/NA	Solid	8021B	38226
LCS 880-38226/1-A	Lab Control Sample	Total/NA	Solid	8021B	38226
LCSD 880-38226/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38226
890-3309-A-3-B MS	Matrix Spike	Total/NA	Solid	8021B	38226
890-3309-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38226

Prep Batch: 38226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3310-1	SS06	Total/NA	Solid	5035	
MB 880-38226/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38226/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38226/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3309-A-3-B MS	Matrix Spike	Total/NA	Solid	5035	
890-3309-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3310-1	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38217

_					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3310-1	SS06	Total/NA	Solid	8015B NM	38261
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015B NM	38261
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38261
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38261
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38261
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38261

Prep Batch: 38261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3310-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-38261/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38261/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38261/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3333-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3333-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3310-1	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38260

Г					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3310-1	SS06	Soluble	Solid	DI Leach	
MB 880-38260/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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Page 11 of 19

QC Association Summary

 Client: Ensolum
 Job ID: 890-3310-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

HPLC/IC (Continued)

Leach Batch: 38260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3306-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3306-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3310-1	SS06	Soluble	Solid	300.0	38260
MB 880-38260/1-A	Method Blank	Soluble	Solid	300.0	38260
LCS 880-38260/2-A	Lab Control Sample	Soluble	Solid	300.0	38260
LCSD 880-38260/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38260
890-3306-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	38260
890-3306-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38260

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-3310-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Client Sample ID: SS06 Lab Sample ID: 890-3310-1

Date Collected: 10/27/22 13:45

Date Received: 10/27/22 16:11

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	38226	10/31/22 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38213	10/31/22 12:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38400	11/01/22 13:51	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38387	11/01/22 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38261	10/31/22 10:25	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38217	10/31/22 15:17	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	38260	10/31/22 10:21	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38377	11/01/22 12:04	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: 890-3310-1

 Project/Site: LeaMex 018
 SDG: 03D2057028

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	ay morado anarytoo tor v
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Method Summary

Job ID: 890-3310-1 Client: Ensolum Project/Site: LeaMex 018 SDG: 03D2057028

Method Method Description Protocol Laboratory

motified Booomption	1100001	<u> Laborator</u> y
Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX Calculation	TAL SOP	EET MID
Diesel Range Organics (DRO) (GC)	SW846	EET MID
Diesel Range Organics (DRO) (GC)	SW846	EET MID
Anions, Ion Chromatography	MCAWW	EET MID
Closed System Purge and Trap	SW846	EET MID
Microextraction	SW846	EET MID
Deionized Water Leaching Procedure	ASTM	EET MID
	Volatile Organic Compounds (GC) Total BTEX Calculation Diesel Range Organics (DRO) (GC) Diesel Range Organics (DRO) (GC) Anions, Ion Chromatography Closed System Purge and Trap Microextraction	Volatile Organic Compounds (GC) Total BTEX Calculation Diesel Range Organics (DRO) (GC) SW846 Diesel Range Organics (DRO) (GC) Anions, Ion Chromatography Closed System Purge and Trap Microextraction SW846 SW846

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: LeaMex 018

Job ID: 890-3310-1 SDG: 03D2057028

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3310-1	SS06	Solid	10/27/22 13:45	10/27/22 16:11	0.2'

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Environment lesting	1010/ VT		
Xenco	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	509-3334 WOIK OIDEI NO: 4-1296	No:
	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	88-3199 www.xenco.com	o.com Page of
roject Manager: NSO ACCOMS Bill to: (II	Bill to: (If different) QA, QA,	Work On	M
372 Nat 1 Parks Huil		Program: UST/PST PRP Brownfields	Brownfields ☐ RRC ☐ Superfund ☐
ansolum CC		<u>Ö</u> .	
ezip: Mour ISDOUM INIM 88221)	te ZIP:	Reporting: Level II Level III	☐ PST/UST ☐ TRRP ☐ Level IV ☐
813-517-8487 Email:	hospitales of support	highnings Deliverables: EDD	ADaPT Other:
Name: I & OVANIA 018 / Turn	1	ANALYSIS REQUEST TO TUM, COM	Preservative Codes
PER STONE PROUB	Pres. Code		None: NO DI Water: H ₂ O
roject Location: 82 (2016) 105,6625 Upue Date: 3 day			Cool: Cool MeOH: Me
ampler's Name: The lab, if received by 4:30pm the lab, if received by 4:30pm	30pm		H ₂ SO ₄ : H ₂ NaOH: Na
AMPLE RECEIPT Temp Blank: Ces No Wetice: Ces No	neters		H ₃ PO ₄ : HP
amples Received Intact: (Yes) No Thermometer ID:			NaHSO 4: NABIS
Yes No MA	P	890-3310 Chain of Custody	Na ₂ S ₂ O ₃ : NaSO ₃
otal Containers: Corrected Temperature:	HIX		NaOH+Ascorbic Acid: SAPC
dentification Matrix	Grab/ #of PO		Sample Comments
SSD16 S 16-7121 1345 2"	CIVV		175 1000 : 0,0 13032
Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texa	13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr C	Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ N	Na Sr Tl Sn U V Zn
Ircle Method(s) and Metal(s) to be analyzed	ILLEY STEE ONLY SO AS BE USE TO COLOR TO WILL MICHAEL STEELS IN COLOR TO WILL MICHAEL STEELS		9.0017.670.7770
office. Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control Eurofins Xenco. A minimum charge of \$85,00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously nego	nt company to Eurofins Xenco, its affiliates and subcontracto, any losses or expenses incurred by the client if such losses an pole submitted to Eurofins Xenco, but not analyzed. These te	xs. It assigns standard terms and conditions re due to circumstances beyond the control erms will be enforced unless previously negotiated.	
ReLinquished by: (Signature) Received by: (Signature)	Date/Time Relinqu	Relinquished by: (Signature) Received by: (Signature)	nature) Date/Time
You mand Chamber Stay	E141 CC/1-C/01 +		
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Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3310-1

 SDG Number: 03D2057028

Login Number: 3310 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	

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3310-1 SDG Number: 03D2057028

> **List Source: Eurofins Midland** List Creation: 10/31/22 08:40 AM

Creator: Rodriguez, Leticia

Login Number: 3310

List Number: 2

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

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701

Generated 12/6/2022 1:30:04 PM Revision 1

JOB DESCRIPTION

Leamex 018 SDG NUMBER 03D2057028

JOB NUMBER

890-3565-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

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

Authorization

Generated 12/6/2022 1:30:04 PM Revision 1

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

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Client: Ensolum
Project/Site: Leamex 018
Laboratory Job ID: 890-3565-1
SDG: 03D2057028

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Racaint Chacklists	19

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Definitions/Glossary

Client: Ensolum Job ID: 890-3565-1 Project/Site: Leamex 018

SDG: 03D2057028

Qualifiers

GC VOA Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

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 Colony Forming Unit **CFU** Contains No Free Liquid CNF

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

Too Numerous To Count **TNTC**

Case Narrative

Client: Ensolum

Project/Site: Leamex 018

Job ID: 890-3565-1

SDG: 03D2057028

Job ID: 890-3565-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3565-1

REVISION

The report being provided is a revision of the original report sent on 12/5/2022. The report (revision 1) is being revised due to Per clent email, requested sample ID change.

Report revision history

Receipt

The sample was received on 11/28/2022 3:37 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 8.0°C

Receipt Exceptions

On <date> client authorized <CHOOSE ONE> sub contract/work share for <Insert Analyses> for the following samples SS07 (890-3565-1).

The following > were received and analyzed from an unpreserved bulk soil jar: SS07 (890-3565-1).

GC VOA

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

GC Semi VOA

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-40737/32), (CCV 880-40737/48), (LCS 880-40765/2-A) and (LCSD 880-40765/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD NM: The surrogate recovery for the blank associated with preparation batch 880-40765 and analytical batch 880-40737 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3569-A-1-D) and (890-3569-A-1-F) MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: Surrogate recovery for the following sample was outside control limits: SS07 (890-3565-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-40765 and analytical batch 880-40737 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

Method 300 ORGFM 28D: The matrix spike (MS) recoveries for preparation batch 880-40727 and analytical batch 880-40840 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The associated samples are: SS07 (890-3565-1), (890-3563-A-1-B) and (890-3563-A-1-C MS).

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

Matrix: Solid

Lab Sample ID: 890-3565-1

Client Sample Results

Client: Ensolum Job ID: 890-3565-1 Project/Site: Leamex 018 SDG: 03D2057028

Client Sample ID: SS07

Date Collected: 11/28/22 10:05 Date Received: 11/28/22 15:37

Sample Depth: 0.2

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/29/22 16:02	12/02/22 22:04	1
Toluene	< 0.00199	U	0.00199	mg/Kg		11/29/22 16:02	12/02/22 22:04	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/29/22 16:02	12/02/22 22:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/29/22 16:02	12/02/22 22:04	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/29/22 16:02	12/02/22 22:04	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/29/22 16:02	12/02/22 22:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			11/29/22 16:02	12/02/22 22:04	1
1,4-Difluorobenzene (Surr)	89		70 - 130			11/29/22 16:02	12/02/22 22:04	1
Method: TAL SOP Total BTEX	- Total BTE	X Calculat	ion					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/05/22 14:17	1
Method: SW846 8015 NM - Die	esel Range (Organics (DRO) (GC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			12/02/22 14:08	1
Method: SW846 8015B NM - D	Diesel Range	e 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		12/01/22 10:39	12/02/22 07:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		12/01/22 10:39	12/02/22 07:23	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/01/22 10:39	12/02/22 07:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			12/01/22 10:39	12/02/22 07:23	1
o-Terphenyl	144	S1+	70 - 130			12/01/22 10:39	12/02/22 07:23	1
Method: MCAWW 300.0 - Anio	ons, Ion Chr	omatograp	ohy - Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

5.05

mg/Kg

17.4

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12/01/22 22:27

Surrogate Summary

Client: Ensolum Job ID: 890-3565-1 Project/Site: Leamex 018 SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Perc	cent Surrogate Red
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3549-A-1-C MS	Matrix Spike	114	102	
890-3549-A-1-D MSD	Matrix Spike Duplicate	104	101	
890-3565-1	SS07	115	89	
LCS 880-40625/1-A	Lab Control Sample	105	100	
LCSD 880-40625/2-A	Lab Control Sample Dup	104	97	
MB 880-40625/5-A	Method Blank	68 S1-	94	
Surrogate Legend				
BFB = 4-Bromofluorobe	enzene (Surr)			
DFBZ = 1,4-Difluorober	nzene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrog	ate Recovery (Acceptance Limits)
ah Canada ID	Oller 1 Ocean Le ID	1CO1	OTPH1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
90-3565-1	SS07	122	144 S1+	
90-3569-A-1-E MS	Matrix Spike	117	126	
90-3569-A-1-F MSD	Matrix Spike Duplicate	136 S1+	142 S1+	
.CS 880-40765/2-A	Lab Control Sample	179 S1+	213 S1+	
.CSD 880-40765/3-A	Lab Control Sample Dup	172 S1+	204 S1+	
/IB 880-40765/1-A	Method Blank	108	140 S1+	

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Client: Ensolum

Job ID: 890-3565-1

SDG: 03D2057028

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40625/5-A

Lab Sample ID: LCS 880-40625/1-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 40842

Project/Site: Leamex 018

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 40625

	МВ	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/29/22 16:02	12/02/22 11:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/29/22 16:02	12/02/22 11:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/29/22 16:02	12/02/22 11:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/29/22 16:02	12/02/22 11:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/29/22 16:02	12/02/22 11:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/29/22 16:02	12/02/22 11:45	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	11/29/22 16:02	12/02/22 11:45
1,4-Difluorobenzene (Surr)	94		70 - 130	11/29/22 16:02	12/02/22 11:45

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40625

Analysis Batch: 40842 Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Benzene 70 - 130 0.100 0.1252 mg/Kg 125 Toluene 0.100 0.1206 mg/Kg 70 - 130 121 Ethylbenzene 0.100 0.1093 mg/Kg 109 70 - 130 0.200 m-Xylene & p-Xylene 0.2198 mg/Kg 110 70 - 130 o-Xylene 0.100 0.1069 mg/Kg 107 70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 40842

Lab Sample ID: LCSD 880-40625/2-A

Prep Type: Total/NA Prep Batch: 40625

	Spike	LCSD LCSD			%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D %Rec	Limits	RPD	Limit
Benzene	0.100	0.1186	mg/Kg	119	70 - 130	5	35
Toluene	0.100	0.1151	mg/Kg	115	70 - 130	5	35
Ethylbenzene	0.100	0.1044	mg/Kg	104	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2094	mg/Kg	105	70 - 130	5	35
o-Xylene	0.100	0.1069	mg/Kg	107	70 - 130	0	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-3549-A-1-C MS

Matrix: Solid

Analysis Batch: 40842

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

Prep Batch: 40625

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.0996	0.1021		mg/Kg	_	103	70 - 130	
Toluene	<0.00201	U	0.0996	0.1062		mg/Kg		107	70 - 130	

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Dil Fac

Prep Batch: 40625

QC Sample Results

Client: Ensolum Job ID: 890-3565-1 Project/Site: Leamex 018 SDG: 03D2057028

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

Lab Sample ID: 890-3549-A-1-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 40842

•	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U	0.0996	0.1009		mg/Kg		101	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.199	0.2022		mg/Kg		101	70 - 130	
o-Xvlene	< 0.00201	U	0.0996	0.1035		ma/Ka		104	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 114 1,4-Difluorobenzene (Surr) 102 70 - 130

Lab Sample ID: 890-3549-A-1-D MSD **Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 40842

								Prep E	oaten: 4	10025
Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
<0.00201	U	0.0990	0.09136		mg/Kg		92	70 - 130	11	35
<0.00201	U	0.0990	0.09165		mg/Kg		93	70 - 130	15	35
< 0.00201	U	0.0990	0.08677		mg/Kg		88	70 - 130	15	35
<0.00402	U	0.198	0.1732		mg/Kg		87	70 - 130	15	35
<0.00201	U	0.0990	0.08889		mg/Kg		90	70 - 130	15	35
	Result <0.00201 <0.00201 <0.00201 <0.00201 <0.00402	Sample Sample Result Qualifier U	Result Qualifier Added <0.00201	Result Qualifier Added Result <0.00201	Result Qualifier Added Result Qualifier <0.00201	Result Qualifier Added Result Qualifier Unit <0.00201	Result Qualifier Added Result Qualifier Unit D <0.00201	Result Qualifier Added Result Qualifier Unit D %Rec <0.00201	Sample Result Qualifier Spike Added Result Qualifier MSD Unit Qualifier D WRec Unit Memory WRec Limits <0.00201 U	Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD <0.00201

MSD MSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 104 70 - 130 101 1,4-Difluorobenzene (Surr) 70 - 130

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

Client Sample ID: Method Blank Lab Sample ID: MB 880-40765/1-A Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 40737							Prep Batch:	40765
-	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		12/01/22 10:39	12/01/22 22:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/01/22 10:39	12/01/22 22:24	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/01/22 10:39	12/01/22 22:24	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Dil Fac Analyzed 1-Chlorooctane 70 - 130 12/01/22 10:39 12/01/22 22:24 108 70 - 130 12/01/22 10:39 12/01/22 22:24 o-Terphenyl 140 S1+

Lab Sample ID: LCS 880-40765/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid							Prep Ty	pe: Total/NA
Analysis Batch: 40737							Prep B	atch: 40765
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	846.1		mg/Kg		85	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1070		mg/Kg		107	70 - 130	
C10-C28)								

Client: Ensolum Job ID: 890-3565-1 SDG: 03D2057028 Project/Site: Leamex 018

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

Lab Sample ID: LCS 880-40765/2-A

Lab Sample ID: LCSD 880-40765/3-A

Lab Sample ID: 890-3569-A-1-E MS

Matrix: Solid

Matrix: Solid

Analysis Batch: 40737

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40765

LCS LCS

%Recovery Qualifier Limits Surrogate 1-Chlorooctane 179 S1+ 70 - 130 o-Terphenyl 213 S1+ 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 40737

Prep Batch: 40765

LCSD LCSD RPD %Rec Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 805.9 mg/Kg 81 70 - 130 5 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1023 mg/Kg 102 70 - 130 5 20

C10-C28)

Matrix: Solid

Analysis Batch: 40737

LCSD LCSD

Sample Sample

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 172 S1+ 70 - 130 70 - 130 o-Terphenyl 204 S1+

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40765

%Rec

Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec <50.0 U Gasoline Range Organics 999 1065 mg/Kg 107 70 - 130 (GRO)-C6-C10 999 Diesel Range Organics (Over 54.2 F1 1306 mg/Kg 125 70 - 130

Spike

C10-C28)

MS MS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 117 o-Terphenyl 126 70 - 130

Lab Sample ID: 890-3569-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

MSD MSD

MS MS

Matrix: Solid

Analysis Batch: 40737

Prep Type: Total/NA Prep Batch: 40765

%Rec **RPD**

Result Qualifier Added Result Qualifier Limits **RPD** Limit Analyte Unit %Rec Gasoline Range Organics <50.0 U 997 1233 124 70 - 130 20 mg/Kg 15 (GRO)-C6-C10 Diesel Range Organics (Over 54.2 F1 997 1501 F1 mg/Kg 145 70 - 130 14 20

Spike

C10-C28)

MSD MSD

Sample Sample

%Recovery Qualifier Limits Surrogate 136 S1+ 1-Chlorooctane 70 - 130 o-Terphenyl 142 S1+ 70 - 130

QC Sample Results

Client: Ensolum Job ID: 890-3565-1 Project/Site: Leamex 018 SDG: 03D2057028

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40727/1-A

Client Sample ID: Method Blank

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Analysis Batch: 40840

Matrix: Solid

MB MB

Analyte Result Qualifier RL Unit D Analyzed Dil Fac Prepared 5.00 12/01/22 21:27 Chloride <5.00 U mg/Kg

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

Lab Sample ID: LCS 880-40727/2-A **Matrix: Solid**

Lab Sample ID: LCSD 880-40727/3-A

Analysis Batch: 40840

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 90 - 110 261.2 mg/Kg 104

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 40840

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

Lab Sample ID: 890-3563-A-1-C MS **Client Sample ID: Matrix Spike Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40840

Spike MS MS %Rec Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 17.4 F1 248 305.8 F1 90 - 110 mg/Kg 117

Lab Sample ID: 890-3563-A-1-D MSD

Matrix: Solid

Analysis Batch: 40840

MSD MSD RPD Sample Sample Spike %Rec Analyte Result Qualifier Added Unit Limits RPD Limit Result Qualifier %Rec Chloride 17.4 F1 248 288.7 110 20 mg/Kg 90 - 110 6

QC Association Summary

 Client: Ensolum
 Job ID: 890-3565-1

 Project/Site: Leamex 018
 SDG: 03D2057028

GC VOA

Prep Batch: 40625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3565-1	SS07	Total/NA	Solid	5035	
MB 880-40625/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40625/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40625/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3549-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3549-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3565-1	SS07	Total/NA	Solid	8021B	40625
MB 880-40625/5-A	Method Blank	Total/NA	Solid	8021B	40625
LCS 880-40625/1-A	Lab Control Sample	Total/NA	Solid	8021B	40625
LCSD 880-40625/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40625
890-3549-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	40625
890-3549-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40625

Analysis Batch: 41058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3565-1	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3565-1	SS07	Total/NA	Solid	8015B NM	40765
MB 880-40765/1-A	Method Blank	Total/NA	Solid	8015B NM	40765
LCS 880-40765/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40765
LCSD 880-40765/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40765
890-3569-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	40765
890-3569-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40765

Prep Batch: 40765

Lab Sample ID 890-3565-1	Client Sample ID SS07	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-40765/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40765/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40765/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3569-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3569-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3565-1	SS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40727

Released to Imaging: 1/11/2023 2:28:21 PM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3565-1	SS07	Soluble	Solid	DI Leach	-
MB 880-40727/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40727/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40727/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: Leamex 018

Job ID: 890-3565-1 SDG: 03D2057028

HPLC/IC (Continued)

Leach Batch: 40727 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3563-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3563-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3565-1	SS07	Soluble	Solid	300.0	40727
MB 880-40727/1-A	Method Blank	Soluble	Solid	300.0	40727
LCS 880-40727/2-A	Lab Control Sample	Soluble	Solid	300.0	40727
LCSD 880-40727/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40727
890-3563-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	40727
890-3563-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	40727

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-3565-1

 Project/Site: Leamex 018
 SDG: 03D2057028

Client Sample ID: 890-3565-1

Date Collected: 11/28/22 10:05
Date Received: 11/28/22 15:37

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	40625	11/29/22 16:02	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40842	12/02/22 22:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			41058	12/05/22 14:17	AJ	EET MID
Total/NA	Analysis	8015 NM		1			40905	12/02/22 14:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40765	12/01/22 10:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40737	12/02/22 07:23	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	40727	11/30/22 15:52	SMC	EET MID
Soluble	Analysis	300.0		1			40840	12/01/22 22:27	SMC	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3565-1

 Project/Site: Leamex 018
 SDG: 03D2057028

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analyte	s are included in this ren	art but the laboratory is r	act cortified by the governing outbority	This list may include analytes for
		ort, but the laboratory is i	not certified by the governing authority.	This list may include analytes for
the agency does not		ort, but the laboratory is i	lot certilled by the governing authority.	This list may include analytes for
• •		Matrix	Analyte	This list may include analytes for
the agency does not o	offer certification.	•	, , ,	This list may include analytes for

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Method Summary

Client: Ensolum

Project/Site: Leamex 018

Job ID: 890-3565-1

SDG: 03D2057028

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: Leamex 018

Job ID: 890-3565-1

SDG: 03D2057028

Lab Sample ID Client Sample ID Collected Matrix Received Depth 890-3565-1 SS07 Solid 11/28/22 10:05 11/28/22 15:37 0.2

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eurofins Xenco **Environment Testing**

City, State ZIP:

Midland, TX 79701

City, State ZIP:

Midland, TX 79701

Reporting: Level III Devel III PST/UST TRRP

ADaPT []

Other:

Level IV

Deliverables: EDD

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

Work Order Comments

www.xenco.com

State of Project:

601 N Marienfeld St Suite 400

Company Name: Bill to: (if different)

Ensolum, LLC Kalei Jennings

601 N Marienfeld St Suite 400

Ensolum, LLC Josh Adams

Project Manager: Company Name:

Chain of Custody

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

Phone: 303-5 Project Name: (10) Project Number: (13)	180mey 018 (1800) 1871/7 8	Turn Around Pres.	Pres.	om, jadams@e	ANALYS	S REQUEST	Preservative Codes None: NO DI Water: H ₂ O	٥
Project Location: 32.8 Sampler's Name: PO #:	Julianna Falcomata	Due Date: TAT starts the day received by the lab, if received by 4:30pm	rs				Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ NaOH: Na	
SAMPLE RECEIPT Samples Received Intact:	Temp Blank: Yes No W. (Yes) No Thermometer ID:	wet ice: Yes No	ramete	300.0)			H₃PO4: HP NaHSO4: NABIS	
_	0		Pa	PA:			Na ₂ S ₂ O ₃ : NaSO ₃	
92	No (NIA)	Temperature Reading: (5)			890-3565 Ch	890-3565 Chain of Custody	Zn Acetate+NaOH: Zn	
Total Containers:		Corrected Temperature: 8		015)			NaOH+Ascorbic Acid: SAPC	<u></u>
Sample Identification	on Matrix Sampled	Time Depth Grab/	# of	TPH (80			Sample Comments	
FS08	5 11-28-22	1005 ·2' C	-	1				
Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed		8RCRA 13PPM Texas 11 Al TCLP / SPLP 6010: 8RCRA	1 AI St	Sb As Ba Be B Sb As Ba Be (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 Tl U	K Se A	Ng SiO₂ Na Sr Ti Sn U V Zn Hg: 1631/245.1/7470/7471	
tice: Signature of this docume service. Eurofins Xenco will be Eurofins Xenco. A minimum ch	nt and relinquishment of samples co e liable only for the cost of samples harge of \$85.00 will be applied to eac	onstitutes a valid purchase order fro and shall not assume any responsit ch project and a charge of \$5 for eac	m client cou pility for any th sample s	npany to Eurofins) losses or expense ubmitted to Eurofin	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.	, it assigns standard terms and con are due to circumstances beyond the s will be enforced unless previously	ditions s control negotiated.	
Relinquished by: (Signature)	>	Received by: (Signature)		Date/Time	Relinquished by: (Signature)	ture) Received by: (Signature)	(Signature) Date/Time	
*	Clare	5	11.0%	1.08.99 15g	27			
\$ (8)					6			

Work Order No:

12/6/2022 (Rev. 1)

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3565-1 SDG Number: 03D2057028

Login Number: 3565 **List Source: Eurofins Carlsbad**

List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3565-1

SDG Number: 03D2057028

List Source: Eurofins Midland
List Number: 2
List Creation: 11/30/22 12:31 PM

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

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3368-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Leamex 18

For:

🛟 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings



Authorized for release by: 11/7/2022 3:33:14 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project

.....LINKS

results through

Have a Question?



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

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

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

Client: Ensolum
Project/Site: Leamex 18

Laboratory Job ID: 890-3368-1
SDG: Lea County NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	14
QC Sample Results	15
QC Association Summary	19
Lab Chronicle	22
Certification Summary	26
Method Summary	27
Sample Summary	28
Chain of Custody	29
Receipt Checklists	31

9

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6

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Definitions/Glossary

Job ID: 890-3368-1 Client: Ensolum Project/Site: Leamex 18 SDG: Lea County NM

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**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum Job ID: 890-3368-1
Project/Site: Leamex 18 SDG: Lea County NM

Job ID: 890-3368-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3368-1

Receipt

The samples were received on 11/3/2022 8:13 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 1.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-3368-1), FS02 (890-3368-2), FS03 (890-3368-3), FS04 (890-3368-4), FS05 (890-3368-5), FS06 (890-3368-6), FS07 (890-3368-7), FS08 (890-3368-8), FS09 (890-3368-9), FS10 (890-3368-10) and FS11 (890-3368-11).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38647 and analytical batch 880-38705 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

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Lab Sample ID: 890-3368-1

Client Sample Results

Client: Ensolum Job ID: 890-3368-1 Project/Site: Leamex 18 SDG: Lea County NM

Client Sample ID: FS01

Date Collected: 11/02/22 11:30 Date Received: 11/03/22 08:13

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F1 F2	0.00202	mg/Kg		11/03/22 14:12	11/04/22 13:47	1
Toluene	<0.00202	U F1 F2	0.00202	mg/Kg		11/03/22 14:12	11/04/22 13:47	1
Ethylbenzene	<0.00202	U F1 F2	0.00202	mg/Kg		11/03/22 14:12	11/04/22 13:47	1
m-Xylene & p-Xylene	<0.00403	U F1 F2	0.00403	mg/Kg		11/03/22 14:12	11/04/22 13:47	1
o-Xylene	<0.00202	U F1 F2	0.00202	mg/Kg		11/03/22 14:12	11/04/22 13:47	1
Xylenes, Total	<0.00403	U F1 F2	0.00403	mg/Kg		11/03/22 14:12	11/04/22 13:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			11/03/22 14:12	11/04/22 13:47	1
1,4-Difluorobenzene (Surr)	100		70 - 130			11/03/22 14:12	11/04/22 13:47	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/04/22 15:58	1
Method: SW846 8015 NM - Diese Analyte		ics (DRO) (C Qualifier	GC)	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
		Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/07/22 11:56	Dil Fac
Analyte Total TPH	Result <50.0	Qualifier U	50.0 RL		<u>D</u>	Prepared		
Analyte	Result <50.0	Qualifier U	50.0 RL		<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <50.0	Qualifier Unics (DRO) Qualifier	RL 50.0	mg/Kg			11/07/22 11:56	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	RL 50.0	mg/Kg		Prepared	11/07/22 11:56 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies	Result sel Range Orga Result <50.0	Qualifier U nics (DRO) Qualifier U	RL	mg/Kg Unit mg/Kg		Prepared 11/04/22 13:34	11/07/22 11:56 Analyzed 11/05/22 21:59	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U nics (DRO) Qualifier U	RL 50.0 (GC) RL 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34	11/07/22 11:56 Analyzed 11/05/22 21:59 11/05/22 21:59	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	Result	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34	Analyzed 11/05/22 21:59 11/05/22 21:59 11/05/22 21:59	1 Dil Fac 1 1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U nics (DRO) Qualifier U U	RL	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared	Analyzed 11/05/22 21:59 11/05/22 21:59 11/05/22 21:59 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	Qualifier U nics (DRO) Qualifier U 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 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared 11/04/22 13:34	Analyzed 11/05/22 21:59 11/05/22 21:59 11/05/22 21:59 Analyzed 11/05/22 21:59	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) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U nics (DRO) Qualifier U 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 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared 11/04/22 13:34	Analyzed 11/05/22 21:59 11/05/22 21:59 11/05/22 21:59 Analyzed 11/05/22 21:59	1 Dil Fac 1 1 1 1 Dil Fac 1

Client Sample ID: FS02

Date Collected: 11/02/22 11:35

Date Received: 11/03/22 08:13 Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 14:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 14:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 14:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/03/22 14:12	11/04/22 14:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 14:16	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/03/22 14:12	11/04/22 14:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/03/22 14:12	11/04/22 14:16	1

Eurofins Carlsbad

Lab Sample ID: 890-3368-2

Matrix: Solid

Lab Sample ID: 890-3368-2

Job ID: 890-3368-1 SDG: Lea County NM

Client Sample ID: FS02

Project/Site: Leamex 18

Date Collected: 11/02/22 11:35 Date Received: 11/03/22 08:13

Sample Depth: 3'

Client: Ensolum

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	93	70 - 130	11/03/22 14:12	11/04/22 14:16	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/04/22 15:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	84.4		49.8	mg/Kg			11/07/22 11:56	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	<49.8	U	49.8	mg/Kg		11/04/22 13:34	11/06/22 01:35	1
Diesel Range Organics (Over C10-C28)	84.4		49.8	mg/Kg		11/04/22 13:34	11/06/22 01:35	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/04/22 13:34	11/06/22 01:35	1
0	0/ 5	O	1 :			D	A I I	D# 5

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98	70 - 130	11/04/22 13:34	11/06/22 01:35	1
o-Terphenyl	94	70 - 130	11/04/22 13:34	11/06/22 01:35	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.5		4.99	mg/Kg			11/04/22 19:28	1

Client Sample ID: FS03 Lab Sample ID: 890-3368-3

Date Collected: 11/02/22 11:40 Date Received: 11/03/22 08:13

Sample Depth: 3'

Mothodi	CIMOAC GOOAD	Valatile Or	ganic Compour	de (CC)
i wethod:	5W846 8U21B	- volatile Ur	danic Compour	ias (GC)

mothod. Offoro COLID Tolutile	, organio comp	ourius (CC)	,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 14:36	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 14:36	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 14:36	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/03/22 14:12	11/04/22 14:36	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 14:36	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/03/22 14:12	11/04/22 14:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130			11/03/22 14:12	11/04/22 14:36	1
1,4-Difluorobenzene (Surr)	103		70 - 130			11/03/22 14:12	11/04/22 14:36	1

Method: TAI	SOP Total BTFX	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/04/22 15:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	40.6		49.9	mg/Kg			11/07/22 11:56	1

Eurofins Carlsbad

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Matrix: Solid

Lab Sample ID: 890-3368-3

11/04/22 19:43

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3368-1 Project/Site: Leamex 18 SDG: Lea County NM

Client Sample ID: FS03

Date Collected: 11/02/22 11:40 Date Received: 11/03/22 08:13

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/04/22 13:34	11/05/22 23:24	1
Diesel Range Organics (Over C10-C28)	40.6		49.9	mg/Kg		11/04/22 13:34	11/05/22 23:24	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/04/22 13:34	11/05/22 23:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			11/04/22 13:34	11/05/22 23:24	1
o-Terphenyl	106		70 - 130			11/04/22 13:34	11/05/22 23:24	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

4.98

mg/Kg

Client Sample ID: FS04 Lab Sample ID: 890-3368-4

31.7

Date Collected: 11/02/22 11:45

Date Received: 11/03/22 08:13

Sample Depth: 3'

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		11/03/22 14:12	11/04/22 14:57	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/03/22 14:12	11/04/22 14:57	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/03/22 14:12	11/04/22 14:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/03/22 14:12	11/04/22 14:57	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/03/22 14:12	11/04/22 14:57	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/03/22 14:12	11/04/22 14:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130			11/03/22 14:12	11/04/22 14:57	1
1,4-Difluorobenzene (Surr)	96		70 - 130			11/03/22 14:12	11/04/22 14:57	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			11/04/22 15:58	1
Total BTEX			*****					•
-								
• •	el Range Organ	ics (DRO) (·
: Method: SW846 8015 NM - Diese	el Range Organ		GC)	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ	ics (DRO) (GC)		<u>D</u>	Prepared		Dil Fac
Method: SW846 8015 NM - Diese Analyte	Range Organ Result 18.7	ics (DRO) (RL 50.0	Unit	<u>D</u>	Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result 18.7 sel Range Orga	ics (DRO) (RL 50.0	Unit	D D	Prepared Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result 18.7 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 50.0	<mark>Unit</mark> mg/Kg		<u> </u>	Analyzed 11/07/22 11:56	1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	el Range Organ Result 18.7 sel Range Orga Result	Qualifier nics (DRO) Qualifier	GC) RL 50.0 (GC) RL	Unit mg/Kg		Prepared	Analyzed 11/07/22 11:56 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	el Range Organ Result 18.7 sel Range Orga Result	cos (DRO) (Qualifier nics (DRO) Qualifier U	GC) RL 50.0 (GC) RL	Unit mg/Kg		Prepared	Analyzed 11/07/22 11:56 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 C10-C28)	el Range Organ Result 18.7 sel Range Orga Result <50.0 18.7	ics (DRO) (Qualifier nics (DRO) Qualifier U	GC) RL 50.0 (GC) RL 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/06/22 00:49 11/06/22 00:49	1 Dil Fac 1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10	el Range Organ Result 18.7 sel Range Orga Result <50.0	ics (DRO) (Qualifier nics (DRO) Qualifier U	(GC) RL 50.0 RL 50.0	Unit mg/Kg Unit mg/Kg		Prepared 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/06/22 00:49	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)	sel Range Organ Result 18.7 sel Range Orga Result <50.0 18.7 <50.0 %Recovery	ics (DRO) (Qualifier nics (DRO) Qualifier U	GC) RL 50.0 (GC) RL 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared	Analyzed 11/07/22 11:56 Analyzed 11/06/22 00:49 11/06/22 00:49	1 Dil Fac 1 1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	sel Range Organ Result 18.7 sel Range Orga Result <50.0 18.7	ics (DRO) (Qualifier nics (DRO) Qualifier U	GC) RL 50.0 (GC) RL 50.0 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/06/22 00:49 11/06/22 00:49	1 Dil Fac 1

Lab Sample ID: 890-3368-4

Client Sample Results

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3368-1
SDG: Lea County NM

Client Sample ID: FS04

Date Collected: 11/02/22 11:45 Date Received: 11/03/22 08:13

Sample Depth: 3'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	63.5		4.95	mg/Kg			11/04/22 19:47	1	

Client Sample ID: FS05

Date Collected: 11/02/22 11:50

Lab Sample ID: 890-3368-5

Matrix: Solid

Date Collected: 11/02/22 11:50 Date Received: 11/03/22 08:13

Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		11/03/22 14:12	11/04/22 15:17	
Toluene	<0.00199	U	0.00199	mg/Kg		11/03/22 14:12	11/04/22 15:17	
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/03/22 14:12	11/04/22 15:17	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/03/22 14:12	11/04/22 15:17	
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/03/22 14:12	11/04/22 15:17	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/03/22 14:12	11/04/22 15:17	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	120		70 - 130			11/03/22 14:12	11/04/22 15:17	
1,4-Difluorobenzene (Surr)	98		70 - 130			11/03/22 14:12	11/04/22 15:17	
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/04/22 15:58	-
Method: SW846 8015 NM - Diese Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	16.5		50.0	mg/Kg		<u> </u>	11/07/22 11:56	
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 01:10	
Diesel Range Organics (Over C10-C28)	16.5		50.0	mg/Kg		11/04/22 13:34	11/06/22 01:10	
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 01:10	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	96		70 - 130			11/04/22 13:34	11/06/22 01:10	
o-Terphenyl	97		70 - 130			11/04/22 13:34	11/06/22 01:10	
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
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Lab Sample ID: 890-3368-6

Client Sample Results

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3368-1
SDG: Lea County NM

Client Sample ID: FS06

Date Collected: 11/02/22 11:55 Date Received: 11/03/22 08:13

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 15:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 15:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 15:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/03/22 14:12	11/04/22 15:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 15:38	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/03/22 14:12	11/04/22 15:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			11/03/22 14:12	11/04/22 15:38	1
1,4-Difluorobenzene (Surr)	93		70 - 130			11/03/22 14:12	11/04/22 15:38	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	O	0.00399	mg/Kg			11/04/22 15:58	1
Method: SW846 8015 NM - Diese			GC)					
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH		Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/07/22 11:56	Dil Fac
Analyte Total TPH	Result <50.0	Qualifier U	50.0		<u>D</u>	Prepared		
Analyte Total TPH Method: SW846 8015B NM - Die	Result <50.0 sel Range Orga	Qualifier U	50.0		D	Prepared Prepared		
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics	Result <50.0 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 50.0	mg/Kg	_ =		11/07/22 11:56	1
Analyte	Result <50.0 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	RL 50.0 (GC)	mg/Kg	_ =	Prepared	11/07/22 11:56 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 sel Range Orga Result <50.0	Qualifier U nics (DRO) Qualifier U	(GC) RL 50.0	mg/Kg Unit mg/Kg	_ =	Prepared 11/04/22 13:34	11/07/22 11:56 Analyzed 11/05/22 23:03	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 11/04/22 13:34 11/04/22 13:34	11/07/22 11:56 Analyzed 11/05/22 23:03 11/05/22 23:03	1 Dil Fac 1 1
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 11/04/22 13:34 11/04/22 13:34	11/07/22 11:56 Analyzed 11/05/22 23:03 11/05/22 23:03	1 Dil Fac 1
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared	Analyzed 11/05/22 23:03 11/05/22 23:03 11/05/22 23:03 Analyzed	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.0	Qualifier U nics (DRO) Qualifier U 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 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared 11/04/22 13:34	11/07/22 11:56 Analyzed 11/05/22 23:03 11/05/22 23:03 Analyzed 11/05/22 23:03	1 Dil Fac 1 Dil Fac 1
Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <50.0	Qualifier U nics (DRO) Qualifier U 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 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared 11/04/22 13:34	11/07/22 11:56 Analyzed 11/05/22 23:03 11/05/22 23:03 Analyzed 11/05/22 23:03	1 Dil Fac 1 Dil Fac 1

Client Sample ID: FS07

Date Collected: 11/02/22 12:00 Date Received: 11/03/22 08:13

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 15:58	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 15:58	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 15:58	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/03/22 14:12	11/04/22 15:58	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 15:58	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/03/22 14:12	11/04/22 15:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/03/22 14:12	11/04/22 15:58	

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Lab Sample ID: 890-3368-7

Matrix: Solid

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Client Sample Results

Client: EnsolumJob ID: 890-3368-1Project/Site: Leamex 18SDG: Lea County NM

Client Sample ID: FS07 Lab Sample ID: 890-3368-7

Date Collected: 11/02/22 12:00 Matrix: Solid
Date Received: 11/03/22 08:13

Sample Depth: 3'

Method: SVV846 8021B -	voiatile Organic	: Compounas (GC) (Continued)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91	70 - 130	11/03/22 14:12	11/04/22 15:58	1

Mothod: TAL SOP	Total BTEX - Total BTEX Calculation
Method. IAL JOI	Total BIEX - Total BIEX Calculation

Analyte	Result Qualifier		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396 U	0.00396	mg/Kg			11/07/22 15:29	1

Mathada CMO4C CO4E NM Disaal Dawns Comenica (DDC) (C	~ \
Method: SW846 8015 NM - Diesel Range Organics (DRO) (G	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	11.1		50.0	mg/Kg	<u></u>		11/07/22 11:56	1

Method: SW846 8015B	NM - Diesel Range	Organics (DRO) (G	C)
Michiga. Offoto ou lob	THIN - Dicaci Italige	organics (bito) (c	, – ,

	0 0	, ,	. ,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 01:31	1
Diesel Range Organics (Over C10-C28)	11.1		50.0	mg/Kg		11/04/22 13:34	11/06/22 01:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 01:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106	70 - 130	11/04/22 13:34	11/06/22 01:31	1
o-Terphenyl	101	70 - 130	11/04/22 13:34	11/06/22 01:31	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qua	lifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.1	5.01	mg/Kg			11/04/22 20:12	1

Client Sample ID: FS08 Lab Sample ID: 890-3368-8

Date Collected: 11/02/22 12:05 Date Received: 11/03/22 08:13

Sample Depth: 3'

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Method: SW846 8021B	- Volatilo Organic C	'ampounde (CC)
I MELITOU. SYVOHO OUZ IL	• Voiatile Organic C	onibounus (GC)

Wiethou. Strong ouz ID - Volati	le Organic Comp		,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		11/03/22 14:12	11/04/22 16:18	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/03/22 14:12	11/04/22 16:18	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/03/22 14:12	11/04/22 16:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/03/22 14:12	11/04/22 16:18	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/03/22 14:12	11/04/22 16:18	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/03/22 14:12	11/04/22 16:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			11/03/22 14:12	11/04/22 16:18	1
1 4-Difluorobenzene (Surr)	101		70 130			11/03/22 14:12	11/04/22 16:18	1

Mothod: TAI	COD Total DTEV	- Total RTFY Calculation	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/07/22 15:29	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (G
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Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	18.0	50.0	mg/Kg			11/07/22 11:56	1

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Matrix: Solid

Lab Sample ID: 890-3368-8

11/04/22 20:17

Job ID: 890-3368-1

Client: Ensolum Project/Site: Leamex 18 SDG: Lea County NM

Client Sample ID: FS08

Date Collected: 11/02/22 12:05 Date Received: 11/03/22 08:13

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 01:52	1
Diesel Range Organics (Over C10-C28)	18.0		50.0	mg/Kg		11/04/22 13:34	11/06/22 01:52	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 01:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			11/04/22 13:34	11/06/22 01:52	1
o-Terphenyl	108		70 - 130			11/04/22 13:34	11/06/22 01:52	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: FS09 Lab Sample ID: 890-3368-9 Date Collected: 11/02/22 12:10 Matrix: Solid

5.00

32.2

mg/Kg

Date Received: 11/03/22 08:13

Sample Depth: 3'

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/03/22 14:12	11/04/22 16:39	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/03/22 14:12	11/04/22 16:39	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/03/22 14:12	11/04/22 16:39	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		11/03/22 14:12	11/04/22 16:39	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/03/22 14:12	11/04/22 16:39	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		11/03/22 14:12	11/04/22 16:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130			11/03/22 14:12	11/04/22 16:39	1
1,4-Difluorobenzene (Surr)	102		70 - 130			11/03/22 14:12	11/04/22 16:39	1
Method: TAL SOP Total BTEX - 1	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	II	0.00404	mg/Kg			11/07/22 15:29	1
TOTAL DILA	~0.00 ~ 0~	U	0.00404	mg/kg			11/07/22 15:29	I
- -	٧٥.00	O	0.00404	mg/kg			11/07/22 15.29	Į
• •	el Range Organ	ics (DRO) (11/07/22 15.29	
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result	ics (DRO) (GC)	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ	ics (DRO) (GC)		<u>D</u>	Prepared		
Method: SW846 8015 NM - Diese Analyte Total TPH	Range Organ Result <49.9	ics (DRO) (Qualifier	RL 49.9	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result <49.9 sel Range Orga	ics (DRO) (Qualifier	RL 49.9	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result <49.9 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)	<mark>Unit</mark> mg/Kg			Analyzed 11/07/22 11:56	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	Range Organ Result <49.9 sel Range Orga Result	Qualifier Unics (DRO) Qualifier	(GC) RL (GC) RL	Unit mg/Kg		Prepared	Analyzed 11/07/22 11:56 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	Range Organ Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U u U U U U U U U U U U U U U U U U U	(GC) RL (GC) RL	Unit mg/Kg		Prepared	Analyzed 11/07/22 11:56 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)	sel Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9	cics (DRO) (Control of the property of the pro	GC) RL 49.9 (GC) RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/05/22 23:45 11/05/22 23:45	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)	Result Seel Range Organ Result Result Result 49.9	cics (DRO) (Control of the property of the pro	(GC) RL 49.9 (GC) RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/05/22 23:45	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	cics (DRO) (Control of the control o	GC) RL 49.9 (GC) RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/05/22 23:45 11/05/22 23:45	Dil Fac Dil Fac 1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	sel Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9	cics (DRO) (Control of the control o	GC) RL 49.9 (GC) RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/05/22 23:45 11/05/22 23:45	Dil Fac Dil Fac 1 1 1

Lab Sample ID: 890-3368-9

Client Sample Results

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3368-1

SDG: Lea County NM

Client Sample ID: FS09

Date Collected: 11/02/22 12:10 Date Received: 11/03/22 08:13

Sample Depth: 3'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
	Chloride	23.9		4.98	mg/Kg			11/04/22 20:22	1	

Client Sample ID: FS10

Lab Sample ID: 890-3368-10

Matrix: Solid

Date Collected: 11/02/22 12:15 Date Received: 11/03/22 08:13

Sample Depth: 3'

(GRO)-C6-C10

Diesel Range Organics (Over

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 16:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 16:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 16:59	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/03/22 14:12	11/04/22 16:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 16:59	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/03/22 14:12	11/04/22 16:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130			11/03/22 14:12	11/04/22 16:59	1
1,4-Difluorobenzene (Surr)	100		70 - 130			11/03/22 14:12	11/04/22 16:59	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total BTEX	Result <0.00399		RL 0.00399	Mg/Kg	<u>D</u>	Prepared	Analyzed 11/07/22 15:29	Dil Fac
	<0.00399	U	0.00399		<u>D</u>	Prepared		Dil Fac
Total BTEX	<0.00399	U	0.00399		<u>D</u> 	Prepared Prepared		Dil Fac Dil Fac
Total BTEX Method: SW846 8015 NM - Die	<0.00399	ics (DRO) (C	0.00399 GC)	mg/Kg			11/07/22 15:29	1
Total BTEX Method: SW846 8015 NM - Die Analyte	<0.00399 esel Range Organ Result <49.9	ics (DRO) ((Qualifier	0.00399 GC) RL 49.9	mg/Kg			11/07/22 15:29 Analyzed	1
Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH	<0.00399 esel Range Organ Result <49.9 Diesel Range Organ	ics (DRO) ((Qualifier	0.00399 GC) RL 49.9	mg/Kg			11/07/22 15:29 Analyzed	1

C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	11/04/22 13:34	11/06/22 00:07	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130		11/04/22 13:34	11/06/22 00:07	1
o-Terphenyl	115		70 - 130		11/04/22 13:34	11/06/22 00:07	1

49.9

mg/Kg

<49.9 U

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
	Chloride	24.5	4.95	mg/Kg			11/04/22 20:27	1	

Eurofins Carlsbad

11/06/22 00:07

11/04/22 13:34

Lab Sample ID: 890-3368-11

Client Sample Results

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3368-1
SDG: Lea County NM

Client Sample ID: FS11

Date Collected: 11/02/22 12:20 Date Received: 11/03/22 08:13

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/03/22 14:12	11/04/22 19:10	1
Toluene	< 0.00199	U	0.00199	mg/Kg		11/03/22 14:12	11/04/22 19:10	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/03/22 14:12	11/04/22 19:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/03/22 14:12	11/04/22 19:10	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/03/22 14:12	11/04/22 19:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/03/22 14:12	11/04/22 19:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			11/03/22 14:12	11/04/22 19:10	1
1,4-Difluorobenzene (Surr)	101		70 - 130			11/03/22 14:12	11/04/22 19:10	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/07/22 15:29	1
-								
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Method: SW846 8015 NM - Diese Analyte	•	ics (DRO) (Qualifier	GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/07/22 11:56	Dil Fac
Analyte	Result <50.0	Qualifier U	50.0 RL		<u>D</u>	Prepared		
Analyte Total TPH	Result <50.0	Qualifier U	50.0 RL		<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <50.0	Qualifier Unics (DRO) Qualifier	RL 50.0	mg/Kg	=		11/07/22 11:56	1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	RL 50.0	mg/Kg	=	Prepared	11/07/22 11:56 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies	Result sel Range Orga Result <50.0	Qualifier U nics (DRO) Qualifier U	RL	mg/Kg Unit mg/Kg	=	Prepared 11/04/22 13:34	11/07/22 11:56 Analyzed 11/06/22 00:28	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result sel Range Orga Result <50.0 \$50.0	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/04/22 13:34 11/04/22 13:34	11/07/22 11:56 Analyzed 11/06/22 00:28 11/06/22 00:28	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	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34	Analyzed 11/06/22 00:28 11/06/22 00:28	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) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U nics (DRO) Qualifier U U	RL	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared	11/07/22 11:56 Analyzed 11/06/22 00:28 11/06/22 00:28 Analyzed	Dil Fac 1 1 Dil Fac 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) Surrogate 1-Chlorooctane	Result	Qualifier U nics (DRO) Qualifier U 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 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared 11/04/22 13:34	11/07/22 11:56 Analyzed 11/06/22 00:28 11/06/22 00:28 Analyzed 11/06/22 00:28	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U nics (DRO) Qualifier U 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 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34 Prepared 11/04/22 13:34	11/07/22 11:56 Analyzed 11/06/22 00:28 11/06/22 00:28 Analyzed 11/06/22 00:28	1 Dil Fac 1 Dil Fac 1

Surrogate Summary

Client: Ensolum Job ID: 890-3368-1 Project/Site: Leamex 18 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		DED4	DED74	Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-3368-1	FS01	93	100	
390-3368-1 MS	FS01	117	102	
390-3368-1 MSD	FS01	119	87	
390-3368-2	FS02	107	93	
390-3368-3	FS03	119	103	
390-3368-4	FS04	124	96	
390-3368-5	FS05	120	98	
390-3368-6	FS06	122	93	
390-3368-7	FS07	117	91	
390-3368-8	FS08	110	101	
390-3368-9	FS09	120	102	
390-3368-10	FS10	120	100	
390-3368-11	FS11	107	101	
_CS 880-38647/1-A	Lab Control Sample	108	99	
_CSD 880-38647/2-A	Lab Control Sample Dup	109	101	
MB 880-38647/5-A	Method Blank	89	101	

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)	
890-3368-1	FS01	91	98	
890-3368-1 MS	FS01	99	85	
890-3368-1 MSD	FS01	95	81	
890-3368-2	FS02	98	94	
890-3368-3	FS03	102	106	
890-3368-4	FS04	106	105	
890-3368-5	FS05	96	97	
890-3368-6	FS06	100	107	
890-3368-7	FS07	106	101	
890-3368-8	FS08	118	108	
890-3368-9	FS09	121	122	
890-3368-10	FS10	114	115	
890-3368-11	FS11	102	105	
LCS 880-38741/2-A	Lab Control Sample	96	101	
LCSD 880-38741/3-A	Lab Control Sample Dup	95	99	
MB 880-38741/1-A	Method Blank	96	106	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Job ID: 890-3368-1 Client: Ensolum Project/Site: Leamex 18 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38647/5-A

Lab Sample ID: LCS 880-38647/1-A

Matrix: Solid

Analysis Batch: 38705

Matrix: Solid Analysis Batch: 38705 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38647

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/03/22 14:12	11/04/22 13:21	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89	70 - 130	11/03/22 14:12	11/04/22 13:21	1
1,4-Difluorobenzene (Surr)	101	70 - 130	11/03/22 14:12	11/04/22 13:21	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38647

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09434	-	mg/Kg		94	70 - 130	
Toluene	0.100	0.1036		mg/Kg		104	70 - 130	
Ethylbenzene	0.100	0.1062		mg/Kg		106	70 - 130	
m-Xylene & p-Xylene	0.200	0.1880		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09220		mg/Kg		92	70 - 130	

LCS LCS

Surrogate	%Recovery (Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-38647/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Solid

Analysis Batch: 38705

Prep Type: Total/NA Prep Batch: 38647

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.09800 mg/Kg 98 70 - 130 35 Toluene 0.100 0.1092 mg/Kg 109 70 - 130 5 35 Ethylbenzene 0.100 0.1055 mg/Kg 106 70 - 130 35 0.200 0.1858 m-Xylene & p-Xylene mg/Kg 93 70 - 130 35 0.100 0.09101 70 - 130 o-Xylene mg/Kg 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-3368-1 MS

Matrix: Solid

Analysis Batch: 38705

Client Sample ID: FS01 Prep Type: Total/NA

Prep Batch: 38647

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F1 F2	0.0998	0.005779	F1	mg/Kg	_	6	70 - 130	
Toluene	<0.00202	U F1 F2	0.0998	0.003954	F1	mg/Kg		4	70 - 130	

QC Sample Results

Client: Ensolum Job ID: 890-3368-1 SDG: Lea County NM Project/Site: Leamex 18

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

Lab Sample ID: 890-3368-1 MS **Matrix: Solid**

Analysis Batch: 38705

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 38647

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U F1 F2	0.0998	0.003555	F1	mg/Kg		4	70 - 130	
m-Xylene & p-Xylene	<0.00403	U F1 F2	0.200	0.009125	F1	mg/Kg		5	70 - 130	
o-Xylene	<0.00202	U F1 F2	0.0998	0.006871	F1	mg/Kg		7	70 - 130	
o-Aylene	<0.00202	UFIF2	0.0998	0.006871	ГІ	mg/Kg		/	10 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	117	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-3368-1 MSD

Matrix: Solid

Client Sample ID: FS01 Prep Type: Total/NA Prep Batch: 38647

Analysis Batch: 38705

		Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte		Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene		<0.00202	U F1 F2	0.0990	0.07647	F2	mg/Kg		77	70 - 130	172	35
Toluene		<0.00202	U F1 F2	0.0990	0.09996	F2	mg/Kg		101	70 - 130	185	35
Ethylbenzene		<0.00202	U F1 F2	0.0990	0.09454	F2	mg/Kg		95	70 - 130	186	35
m-Xylene & p-X	ylene	<0.00403	U F1 F2	0.198	0.1686	F2	mg/Kg		85	70 - 130	179	35
o-Xylene		<0.00202	U F1 F2	0.0990	0.08234	F2	mg/Kg		83	70 - 130	169	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

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

Lab Sample ID: MB 880-38741/1-A

Matrix: Solid

Analysis Batch: 38768

Client	Sample	ID: Met	hod	Blank
	_	_	_	

Prep Type: Total/NA Prep Batch: 38741

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/05/22 20:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/05/22 20:56	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/05/22 20:56	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	11/04/22 13:3	11/05/22 20:56	1
o-Terphenyl	106		70 - 130	11/04/22 13:3	34 11/05/22 20:56	1

Lab Sample ID: LCS 880-38741/2-A

Matrix: Solid

Analysis Batch: 38768

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

Prep Batch: 38741

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	824.1		mg/Kg		82	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	1033		mg/Kg		103	70 - 130
C10-C28)							

Limits

Job ID: 890-3368-1

SDG: Lea County NM

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

Lab Sample ID: LCS 880-38741/2-A **Matrix: Solid**

Lab Sample ID: LCSD 880-38741/3-A

Analysis Batch: 38768

Client: Ensolum Project/Site: Leamex 18

Matrix: Solid

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38741

Surrogate %Recovery Qualifier 1-Chlorooctane 96

70 - 130 o-Terphenyl 101 70 - 130

LCS LCS

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38741

Analysis Batch: 38768 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 818.0 82 70 - 13020 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 986.9 99 mg/Kg 70 - 1305 20 C10-C28)

LCSD LCSD

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

Lab Sample ID: 890-3368-1 MS **Client Sample ID: FS01**

Matrix: Solid

Analysis Batch: 38768

Prep Type: Total/NA Prep Batch: 38741

Sample Sample MS MS Spike Analyte Added Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 997 788.7 mg/Kg 79 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 955.5 mg/Kg 92 70 - 130 C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 99 o-Terphenyl 85 70 - 130

Lab Sample ID: 890-3368-1 MSD **Client Sample ID: FS01**

Matrix: Solid

Analysis Batch: 38768

Prep Type: Total/NA Prep Batch: 38741

Sample Sample MSD MSD %Rec RPD Spike Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits RPD Limit <50.0 U 999 787.1 79 Gasoline Range Organics mg/Kg 70 - 130 n 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 900.2 mg/Kg 87 70 - 130 20

C10-C28)

Surrogate

o-Terphenyl

1-Chlorooctane

MSD MSD %Recovery Qualifier Limits 95 70 - 130 81 70 - 130

QC Sample Results

Client: Ensolum Job ID: 890-3368-1 Project/Site: Leamex 18 SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38712/1-A

Matrix: Solid

Analysis Batch: 38765

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 11/04/22 18:03

Lab Sample ID: LCS 880-38712/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38765

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 256.0 mg/Kg 102 90 - 110

Lab Sample ID: LCSD 880-38712/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** Analysis Batch: 38765

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 256.2 90 - 110 mg/Kg 102

Lab Sample ID: 890-3368-2 MS **Client Sample ID: FS02 Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38765

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 40.5 250 301.1 104 90 - 110 mg/Kg

Lab Sample ID: 890-3368-2 MSD

Matrix: Solid

Analysis Batch: 38765

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 40.5 299.6 mg/Kg 104 90 - 110 0 20

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Client Sample ID: FS02

Prep Type: Soluble

QC Association Summary

Client: Ensolum

Project/Site: Learnex 18

Job ID: 890-3368-1

SDG: Lea County NM

GC VOA

Prep Batch: 38647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3368-1	FS01	Total/NA	Solid	5035	
890-3368-2	FS02	Total/NA	Solid	5035	
890-3368-3	FS03	Total/NA	Solid	5035	
890-3368-4	FS04	Total/NA	Solid	5035	
890-3368-5	FS05	Total/NA	Solid	5035	
890-3368-6	FS06	Total/NA	Solid	5035	
890-3368-7	FS07	Total/NA	Solid	5035	
890-3368-8	FS08	Total/NA	Solid	5035	
890-3368-9	FS09	Total/NA	Solid	5035	
890-3368-10	FS10	Total/NA	Solid	5035	
890-3368-11	FS11	Total/NA	Solid	5035	
MB 880-38647/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38647/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38647/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3368-1 MS	FS01	Total/NA	Solid	5035	
890-3368-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 38705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3368-1	FS01	Total/NA	Solid	8021B	38647
890-3368-2	FS02	Total/NA	Solid	8021B	38647
890-3368-3	FS03	Total/NA	Solid	8021B	38647
890-3368-4	FS04	Total/NA	Solid	8021B	38647
890-3368-5	FS05	Total/NA	Solid	8021B	38647
890-3368-6	FS06	Total/NA	Solid	8021B	38647
890-3368-7	FS07	Total/NA	Solid	8021B	38647
890-3368-8	FS08	Total/NA	Solid	8021B	38647
890-3368-9	FS09	Total/NA	Solid	8021B	38647
890-3368-10	FS10	Total/NA	Solid	8021B	38647
890-3368-11	FS11	Total/NA	Solid	8021B	38647
MB 880-38647/5-A	Method Blank	Total/NA	Solid	8021B	38647
LCS 880-38647/1-A	Lab Control Sample	Total/NA	Solid	8021B	38647
LCSD 880-38647/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38647
890-3368-1 MS	FS01	Total/NA	Solid	8021B	38647
890-3368-1 MSD	FS01	Total/NA	Solid	8021B	38647

Analysis Batch: 38749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3368-1	FS01	Total/NA	Solid	Total BTEX	
890-3368-2	FS02	Total/NA	Solid	Total BTEX	
890-3368-3	FS03	Total/NA	Solid	Total BTEX	
890-3368-4	FS04	Total/NA	Solid	Total BTEX	
890-3368-5	FS05	Total/NA	Solid	Total BTEX	
890-3368-6	FS06	Total/NA	Solid	Total BTEX	
890-3368-7	FS07	Total/NA	Solid	Total BTEX	
890-3368-8	FS08	Total/NA	Solid	Total BTEX	
890-3368-9	FS09	Total/NA	Solid	Total BTEX	
890-3368-10	FS10	Total/NA	Solid	Total BTEX	
890-3368-11	FS11	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum Job ID: 890-3368-1 Project/Site: Leamex 18 SDG: Lea County NM

GC Semi VOA

Prep Batch: 38741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3368-1	FS01	Total/NA	Solid	8015NM Prep	
890-3368-2	FS02	Total/NA	Solid	8015NM Prep	
890-3368-3	FS03	Total/NA	Solid	8015NM Prep	
890-3368-4	FS04	Total/NA	Solid	8015NM Prep	
890-3368-5	FS05	Total/NA	Solid	8015NM Prep	
890-3368-6	FS06	Total/NA	Solid	8015NM Prep	
890-3368-7	FS07	Total/NA	Solid	8015NM Prep	
890-3368-8	FS08	Total/NA	Solid	8015NM Prep	
890-3368-9	FS09	Total/NA	Solid	8015NM Prep	
890-3368-10	FS10	Total/NA	Solid	8015NM Prep	
890-3368-11	FS11	Total/NA	Solid	8015NM Prep	
MB 880-38741/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38741/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38741/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3368-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-3368-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3368-1	FS01	Total/NA	Solid	8015B NM	38741
890-3368-2	FS02	Total/NA	Solid	8015B NM	38741
890-3368-3	FS03	Total/NA	Solid	8015B NM	38741
890-3368-4	FS04	Total/NA	Solid	8015B NM	38741
890-3368-5	FS05	Total/NA	Solid	8015B NM	38741
890-3368-6	FS06	Total/NA	Solid	8015B NM	38741
890-3368-7	FS07	Total/NA	Solid	8015B NM	38741
890-3368-8	FS08	Total/NA	Solid	8015B NM	38741
890-3368-9	FS09	Total/NA	Solid	8015B NM	38741
890-3368-10	FS10	Total/NA	Solid	8015B NM	38741
890-3368-11	FS11	Total/NA	Solid	8015B NM	38741
MB 880-38741/1-A	Method Blank	Total/NA	Solid	8015B NM	38741
LCS 880-38741/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38741
LCSD 880-38741/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38741
890-3368-1 MS	FS01	Total/NA	Solid	8015B NM	38741
890-3368-1 MSD	FS01	Total/NA	Solid	8015B NM	38741

Analysis Batch: 38875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3368-1	FS01	Total/NA	Solid	8015 NM	
890-3368-2	FS02	Total/NA	Solid	8015 NM	
890-3368-3	FS03	Total/NA	Solid	8015 NM	
890-3368-4	FS04	Total/NA	Solid	8015 NM	
890-3368-5	FS05	Total/NA	Solid	8015 NM	
890-3368-6	FS06	Total/NA	Solid	8015 NM	
890-3368-7	FS07	Total/NA	Solid	8015 NM	
890-3368-8	FS08	Total/NA	Solid	8015 NM	
890-3368-9	FS09	Total/NA	Solid	8015 NM	
890-3368-10	FS10	Total/NA	Solid	8015 NM	
890-3368-11	FS11	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Leamex 18
Job ID: 890-3368-1
SDG: Lea County NM

HPLC/IC

Leach Batch: 38712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3368-1	FS01	Soluble	Solid	DI Leach	
890-3368-2	FS02	Soluble	Solid	DI Leach	
890-3368-3	FS03	Soluble	Solid	DI Leach	
890-3368-4	FS04	Soluble	Solid	DI Leach	
890-3368-5	FS05	Soluble	Solid	DI Leach	
890-3368-6	FS06	Soluble	Solid	DI Leach	
890-3368-7	FS07	Soluble	Solid	DI Leach	
890-3368-8	FS08	Soluble	Solid	DI Leach	
890-3368-9	FS09	Soluble	Solid	DI Leach	
890-3368-10	FS10	Soluble	Solid	DI Leach	
890-3368-11	FS11	Soluble	Solid	DI Leach	
MB 880-38712/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38712/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38712/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3368-2 MS	FS02	Soluble	Solid	DI Leach	
890-3368-2 MSD	FS02	Soluble	Solid	DI Leach	

Analysis Batch: 38765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3368-1	FS01	Soluble	Solid	300.0	38712
890-3368-2	FS02	Soluble	Solid	300.0	38712
890-3368-3	FS03	Soluble	Solid	300.0	38712
890-3368-4	FS04	Soluble	Solid	300.0	38712
890-3368-5	FS05	Soluble	Solid	300.0	38712
890-3368-6	FS06	Soluble	Solid	300.0	38712
890-3368-7	FS07	Soluble	Solid	300.0	38712
890-3368-8	FS08	Soluble	Solid	300.0	38712
890-3368-9	FS09	Soluble	Solid	300.0	38712
890-3368-10	FS10	Soluble	Solid	300.0	38712
890-3368-11	FS11	Soluble	Solid	300.0	38712
MB 880-38712/1-A	Method Blank	Soluble	Solid	300.0	38712
LCS 880-38712/2-A	Lab Control Sample	Soluble	Solid	300.0	38712
LCSD 880-38712/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38712
890-3368-2 MS	FS02	Soluble	Solid	300.0	38712
890-3368-2 MSD	FS02	Soluble	Solid	300.0	38712

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Job ID: 890-3368-1 SDG: Lea County NM

Client: Ensolum Project/Site: Leamex 18

Lab Sample ID: 890-3368-1

Client Sample ID: FS01 Date Collected: 11/02/22 11:30

Matrix: Solid

Date Received: 11/03/22 08:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 13:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/04/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			38875	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/05/22 21:59	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38712	11/04/22 10:47	СН	EET MID
Soluble	Analysis	300.0		1			38765	11/04/22 19:23	CH	EET MID

Client Sample ID: FS02 Lab Sample ID: 890-3368-2

Date Collected: 11/02/22 11:35 Date Received: 11/03/22 08:13

DI Leach

300.0

300.0

Matrix: Solid

11/04/22 10:47

11/04/22 19:28

11/04/22 19:43

CH

СН

СН

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Lab **Analyst** Total/NA Prep 5035 5.01 g 5 mL 38647 11/03/22 14:12 MNR EET MID Total/NA 8021B Analysis 1 5 mL 5 mL 38705 11/04/22 14:16 MNR EET MID Total/NA Total BTEX 38749 11/04/22 15:58 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 38875 11/07/22 11:56 SM **EET MID** Total/NA 8015NM Prep 10.04 g 10 mL 38741 11/04/22 13:34 DM **EET MID** Prep Total/NA Analysis 8015B NM 1 uL 1 uL 38768 11/06/22 01:35 SM **EET MID**

Client Sample ID: FS03 Lab Sample ID: 890-3368-3

5.01 g

50 mL

38712

38765

38765

Date Collected: 11/02/22 11:40 Date Received: 11/03/22 08:13

Leach

Analysis

Analysis

Soluble

Soluble

Soluble

Dil Batch Batch Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5035 5.05 g 5 mL 38647 11/03/22 14:12 MNR **EET MID** Total/NA Analysis 8021B 5 mL 5 mL 38705 11/04/22 14:36 MNR **EET MID** Total/NA Total BTEX 38749 11/04/22 15:58 SM **EET MID** Analysis 1 Total/NA Analysis 8015 NM 38875 11/07/22 11:56 SM **EET MID** Total/NA Prep 8015NM Prep 10.02 g 10 ml 38741 11/04/22 13:34 DM **EET MID** Total/NA 8015B NM 38768 11/05/22 23:24 Analysis 1 uL 1 uL SM **EET MID** Soluble DI Leach 5.02 g 50 mL 38712 11/04/22 10:47 CH EET MID Leach

Client Sample ID: FS04 Lab Sample ID: 890-3368-4

Date Collected: 11/02/22 11:45 Date Received: 11/03/22 08:13

	D-4-b	Detek		D.II	1 141 - 1	Final	D-4-b	D		
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 14:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/04/22 15:58	SM	EET MID

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Page 22 of 32

Matrix: Solid

EET MID

EET MID

Matrix: Solid

EET MID

Job ID: 890-3368-1

Client: Ensolum Project/Site: Leamex 18 SDG: Lea County NM

Client Sample ID: FS04 Lab Sample ID: 890-3368-4 Date Collected: 11/02/22 11:45 Matrix: Solid

Date Received: 11/03/22 08:13

	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			38875	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 00:49	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38712	11/04/22 10:47	CH	EET MID
Soluble	Analysis	300.0		1			38765	11/04/22 19:47	CH	EET MID

Client Sample ID: FS05 Lab Sample ID: 890-3368-5 **Matrix: Solid**

Date Collected: 11/02/22 11:50 Date Received: 11/03/22 08:13

	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 15:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/04/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			38875	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 01:10	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38712	11/04/22 10:47	СН	EET MID
Soluble	Analysis	300.0		1			38765	11/04/22 20:02	CH	EET MID

Client Sample ID: FS06 Lab Sample ID: 890-3368-6 Date Collected: 11/02/22 11:55 **Matrix: Solid**

Date Received: 11/03/22 08:13

	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 15:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/04/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			38875	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/05/22 23:03	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38712	11/04/22 10:47	CH	EET MID
Soluble	Analysis	300.0		1			38765	11/04/22 20:07	CH	EET MID

Client Sample ID: FS07 Lab Sample ID: 890-3368-7

Date Collected: 11/02/22 12:00 Date Received: 11/03/22 08:13

_	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 15:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/07/22 15:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38875	11/07/22 11:56	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g 1 uL	10 mL 1 uL	38741 38768	11/04/22 13:34 11/06/22 01:31	DM SM	EET MID EET MID

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Page 23 of 32

Matrix: Solid

Job ID: 890-3368-1

SDG: Lea County NM

Client Sample ID: FS07

Project/Site: Leamex 18

Client: Ensolum

Date Collected: 11/02/22 12:00 Date Received: 11/03/22 08:13

Lab Sample ID: 890-3368-7

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			4.99 g	50 mL	38712	11/04/22 10:47	CH	EET MID
Soluble	Analysis	300.0		1			38765	11/04/22 20:12	CH	EET MID

Client Sample ID: FS08 Lab Sample ID: 890-3368-8

Date Collected: 11/02/22 12:05 **Matrix: Solid**

Date Received: 11/03/22 08:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 16:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/07/22 15:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38875	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 01:52	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38712	11/04/22 10:47	CH	EET MID
Soluble	Analysis	300.0		1			38765	11/04/22 20:17	CH	EET MID

Client Sample ID: FS09 Lab Sample ID: 890-3368-9

Date Collected: 11/02/22 12:10 Date Received: 11/03/22 08:13

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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 16:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/07/22 15:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38875	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/05/22 23:45	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38712	11/04/22 10:47	CH	EET MID
Soluble	Analysis	300.0		1			38765	11/04/22 20:22	CH	EET MID

Client Sample ID: FS10 Lab Sample ID: 890-3368-10

Date Collected: 11/02/22 12:15 Date Received: 11/03/22 08:13

	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 16:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/07/22 15:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38875	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 00:07	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38712	11/04/22 10:47	СН	EET MIC
Soluble	Analysis	300.0		1			38765	11/04/22 20:27	CH	EET MID

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Matrix: Solid

Lab Chronicle

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3368-1
SDG: Lea County NM

Client Sample ID: FS11

Lab Sample ID: 890-3368-11

Matrix: Solid

Date Collected: 11/02/22 12:20 Date Received: 11/03/22 08:13

	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 19:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38749	11/07/22 15:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38875	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 00:28	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38712	11/04/22 10:47	СН	EET MID
Soluble	Analysis	300.0		1			38765	11/04/22 20:32	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

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Accreditation/Certification Summary

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3368-1

SDG: Lea County NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, but	it the laboratory is not certifi	ied by the governing authority. This list ma	av include analytes for
the agency does not of		,	ieu sy ale gerelling aanenly.	ay morado dilarytoo lor
the agency does not of Analysis Method		Matrix	Analyte	ay molado analytoo tor
0 ,	fer certification.	•	, , ,	

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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

EET MID

EET MID

EET MID

Method Summary

Method

8021B

Total BTEX 8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

Client: Ensolum Job ID: 890-3368-1 Project/Site: Leamex 18 SDG: Lea County NM

Protocol	Laboratory	
SW846	EET MID	
TAL SOP	EET MID	
SW846	EET MID	E
SW846	EET MID	5
MCAWW	EET MID	

SW846

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

Sample Summary

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3368-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3368-1	FS01	Solid	11/02/22 11:30	11/03/22 08:13	3'
890-3368-2	FS02	Solid	11/02/22 11:35	11/03/22 08:13	3'
890-3368-3	FS03	Solid	11/02/22 11:40	11/03/22 08:13	3'
890-3368-4	FS04	Solid	11/02/22 11:45	11/03/22 08:13	3'
890-3368-5	FS05	Solid	11/02/22 11:50	11/03/22 08:13	3'
890-3368-6	FS06	Solid	11/02/22 11:55	11/03/22 08:13	3'
890-3368-7	FS07	Solid	11/02/22 12:00	11/03/22 08:13	3'
890-3368-8	FS08	Solid	11/02/22 12:05	11/03/22 08:13	3'
890-3368-9	FS09	Solid	11/02/22 12:10	11/03/22 08:13	3'
890-3368-10	FS10	Solid	11/02/22 12:15	11/03/22 08:13	3'
890-3368-11	FS11	Solid	11/02/22 12:20	11/03/22 08:13	3'

Relinquished by: (Signature)

Received by: (Signature)

13/22

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date 08/25/2020 Rev 2020

Circle M

121314

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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

Work Order No:

	017.000.2000			Eman.	Email Kjernings@ensolum.com	Wellso	urn.com				
ame:	Lean	Leamex 18		Turn	Turn Around				1	ANALYSIS REQUEST	ervativ
umber:	03D20	03D2057028	8	☑ Routine	X Rush	0 1	Code				None: NO DI Water: H ₂ O
ocation:	Lea County, NM	unty, N	M	Due Date:	48HE						Cool: Cool MeOH: Me
s Name:	Conne	Conner Shore	O O	TAT starts the	TAT starts the day received by the lab, if received by 4:30pm		rs		-		H ₂ S0 ₄ : H ₂ NaOH: Na
E RECEIPT	Temp Blank:	ank:	ON SOAL	Wet Ice:	NO CON		.0)				H₃PO₄: HP
Received Intact:		S S	Thermometer ID:	er ID:	イファ	2					NaHSO₄: NABIS
ustody Seals:	Yes No.	1	Correction Factor:	actor:	.C.	4					Na ₂ S ₂ O ₃ : NaSO ₃
ustody Seals:	Yes No	N/A	Temperature Reading:	e Reading:			S (EI	,-	_	Cose Chain of Cu	of Custody Zn Acetate+NaOH: Zn
tainers:			Corrected Temperature:	emperature:	(i)		IDES	-	3021	890-3300	NaOH+Ascorbic Acid: SAPC
ample Identification		Matrix	Date Sampled	Time Sampled	Depth c	Grab/ #	Cont CHLOR	TPH (80	BTEX (Sample Comments
FS01		S	11.2.22	1130	3	C	1 ×	×	×		
FS02		S	11.2.22	1135	3	C	1 ×	×	×		
FS03		S	11.2.22	1140	3'	С	1 ×	×	×		Incident Number
FS04		S	11.2.22	1145	ω ₁	С	1 ×	×	×		
FS05		S	11.2.22	1150	3	С	1 ×	×	×		Cost Code- GA130323
FS06		S	11.2.22	1155	3'	С	×	×	×		AFE 00000000471
FS07		S	11.2.22	1200	ω <u></u>	C	1 ×	×	×		
FS08		S	11 2 22	1205	32	0	×	×	×		
FS09		S	11.2.22	1210	ω	C	×	×	×		
FS10	10	S	11.2.22	1215	ω	C	1 ×	×	×		
200.7 / 6010	200.8 / 6020:	20:	8	8RCRA 13PPM Texas 11 Al Sb As	PM Texa	as 11 /	dS IV	As Ba	Ва Ве В	B Cd Ca Cr Co Cu Fe Pb Mg Mn	Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Zn
hod(s) and N	Ve	analyz	ed	TCLP / S	TCLP / SPLP 6010: 8RCRA	8RCF		Sb As Ba	Be	Cd Cr Co Cu Pb Mn Mo Ni Se A	Se Ag Ti U Hg: 1631/245.1/7470 /7471
ture of this docu	ment and relinqui	shment	of samples con	stitutes a valid p	purchase orde	r from cli	ent comp	any to E	urofins X	nature 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	standard terms and conditions
Eurofins Xenco wi Kenco. A minimur	ill be liable only for m charge of \$85.00	r the cos	t of samples ar	nd shall not assi project and a c	harge of \$5 fo	r each sau	or any lo	mitted to	Eurofins	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 Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiat	ue to circumstances beyond the control be enforced unless previously negotiated.

SAMP PO#:

Samples

Cooler C

Sampler Project I Project N

Project N

Phone:

City, State ZIP:

Midland, TX 79701

City, State ZIP:

Midland, TX 79701

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

Level IV

ADaPT 🗆

Deliverables: EDD

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

Work Order Comments

www.xenco.com

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State of Project:

601 N Marienfeld St Suite 400

601 N Marienfeld St Suite 400

Company Name: Project Manager:

Ensolum, LLC Josh Adams

Bill to: (if different)

Kalei Jennings

Ensolum, LLC

Company Name:

Relinquished by: (Signature)

Received by: (Signature)

1302

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

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

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Environment Testing

Chain of Custody

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

Work Order No:

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Marienfeld SI Suite 400 Accompany Name Ensolum_LLC Company Name Compa	Notice: Signature of this document and re of service. Eurofins Xenco will be liable of Eurofins Xenco. A minimum charge of Eurofins Xenco. A minimum charge of Eurofins is the development of the control	Total 200.7 / 6010 Circle Method(s) and l	N.	, X					FS11	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: 8	City, State ZIP: N			Project Manager: Ju
wnfields RRC Cotter RRC RRC RRC RRC RRC RRC RRC RRC RRC RR	ument and relinquishment of samples will be liable only for the cost of sample um charge of \$85.00 will be applied to e	Metal(s) to be analyzed			- 1	94				Matrix	Corrediec	NO NIA	NO N/A	Yes No	Temp Blank: Yes		Conner Shore	Lea County, NM	03D2057028	Leamex 18	17.683.2503	lidland, TX 79701	01 N Marienfeld St Suite 400	nsolum, LLC	osh Adams
wnfields RRC TRRP TRRP Other: Preservativ None: NO Cool: Cool HCL: HC H2SO4: H2 H3PO4: H2 H3PO4: NABIS Na2S2O3: NaSO3 Zn Acetate+NaOH NaOH+Ascorbic A Sample Co Sample Co AFE 00000 A	constitutes a valid purchase order from sand shall not assume any responsion and a charge of \$5 for each project from the project for the project from the project from the project for the project from the project from the project for the project from the	8RCRA 13PPM Texas 1 TCLP / SPLP 6010: 8					1		ω	Time Depth	d Temperature:	ture Reading:	m Flactor	neter (p:	Wet ke: Yes	the lab, if received by 4:30pm	TAT starts the day received by	_		Turn Around	Email: kjennings@e	City, State ZIP	Address:	Company Nan	Bill to: (if differe
wnfields RRC Confields RRC Cotter None: NO Cool: Cool HcL: Hc H ₂ SQ ₄ : HP NaHSQ ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH NaOH+Ascorbic A Sample Co Sample Co AFE 00000 AFE 00000 Na Sr TI Sn U V 1/245.1/7470 / 7	om client compar	11 Al Sb A							+	# of	RIDE	S (E				<u> </u>	×		Code		ensolum com		601		
wnfields RRC Cotter RRC RRC RRC RRC RRC RRC RRC RRC RRC RR	ny to Eurofins Xenco, its affiliates and subcontracto ses or expenses incurred by the client if such losses itted to Eurofins Xenco, but not analyzed. These ten the substitution of the s	s Ba Be B Cd Ca Cr Co Cu Fe P As Ba Be Cd Cr Co Cu Pb Mn Mo							+	-	-	_										and, TX 79701	N Marienfeld St Suite 400	olum, LLC	Jennings
nents RRC Superfund Other: Other: Other: NO DI Water: H ₂ O; NABIS SO ₄ : NABIS So ₅ : NASO ₃ cetate+NaOH: Zn H+Ascorbic Acid: SAPC Sample Comments Incident Number	rs. It assigns standard terms and conditions sare due to circumstances beyond the control ms will be enforced unless previously negotiated. Altire) Received by: (Signature)	b Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr o Ni Se Ag Ti U Hg: 1631/245.									Nac	ZnA	Zag	Za	H ₃ PC	H ₂ SC	HCL	Cool	None			Reporting: Level II Level III PST/UST	State of Project:	Program: UST/PST [] PRP[] Brownfield	Work Order Comn
	Date∕Time	.1/7470 / 7471			AFE 000000000471	Cost Code- GA130323	lucident Manipoet	Incident Nimbor		Sample Comments	JH+Ascorbic Acid: SAPC	Acetate+NaOH: Zn	S ₂ O ₃ : NaSO ₃	ISO4: NABIS	O ₄ : HP					Preservative Codes	Other:			ts ☐ RRC ☐ Superfund ☐	ments

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3368-1 SDG Number: Lea County NM

List Source: Eurofins Carlsbad

List Number: 1

Login Number: 3368

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) True Sample containers have legible labels. 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 N/A Sample Preservation Verified. 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: 890-3368-1

SDG Number: Lea County NM

Link One one Franchisco Midle and

List Source: Eurofins Midland
List Number: 2
List Creation: 11/04/22 10:22 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

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3369-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Leamex 18

For:

🛟 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 11/7/2022 3:33:36 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project results through EOL

.....LINKS

Received by OCD: 12/14/2022 7:58:20 PM

Have a Question?



Visit us at:

www.eurofinsus.com/Env Released to Imaging: 1/11/2023 2:28:21 PM This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

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

Client: Ensolum

Project/Site: Leamex 18

Laboratory Job ID: 890-3369-1

SDG: Lea County NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	14
Lab Chronicle	16
Certification Summary	18
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receipt Checklists	22

Definitions/Glossary

Job ID: 890-3369-1 Client: Ensolum Project/Site: Leamex 18 SDG: Lea County NM

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**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum Project/Site: Leamex 18 Job ID: 890-3369-1

SDG: Lea County NM

Job ID: 890-3369-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3369-1

Receipt

The samples were received on 11/3/2022 8:13 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 1.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SW01 (890-3369-1), SW02 (890-3369-2), SW03 (890-3369-3), SW04 (890-3369-4) and SW05 (890-3369-5).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38647 and analytical batch 880-38705 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3369-1

SDG: Lea County NM

Client Sample ID: SW01

Date Collected: 11/02/22 12:25

Lab Sample ID: 890-3369-1 Matrix: Solid

11/04/22 13:34

11/06/22 03:21

Date Received: 11/03/22 08:13 Sample Depth: 0-3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 19:30	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 19:30	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 19:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/03/22 14:12	11/04/22 19:30	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 19:30	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/03/22 14:12	11/04/22 19:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/03/22 14:12	11/04/22 19:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130			11/03/22 14:12	11/04/22 19:30	1

Method: TAL SOP Total BTEX - Total	BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/07/22 15:29	1

	Method: SW846 8015 NM - Diesel Ran	ige Organi	ics (DRO) (C	SC)					
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
l	Total TPH	<50.0	U	50.0	mg/Kg			11/07/22 11:56	1

Method: SW846 8015B NM - Dies	sel Range Orga	inics (DRO)) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 03:21	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 03:21	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130			11/04/22 13:34	11/06/22 03:21	1

Method: MCAWW 300.0 - Anions, I	on Chromatography - Sol	luble					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.2	4.97	mg/Kg			11/04/22 16:13	1

70 - 130

Client Sample ID: SW02 Lab Sample ID: 890-3369-2

Date Collected: 11/02/22 12:30
Date Received: 11/03/22 08:13

118

Sample Depth: 0-3'

o-Terphenyl

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/03/22 14:12	11/04/22 19:50	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/03/22 14:12	11/04/22 19:50	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/03/22 14:12	11/04/22 19:50	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/03/22 14:12	11/04/22 19:50	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/03/22 14:12	11/04/22 19:50	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/03/22 14:12	11/04/22 19:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/03/22 14:12	11/04/22 19:50	1

Eurofins Carlsbad

Matrix: Solid

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Lab Sample ID: 890-3369-2

Job ID: 890-3369-1

Client: Ensolum Project/Site: Leamex 18 SDG: Lea County NM

Client Sample ID: SW02

Date Collected: 11/02/22 12:30 Date Received: 11/03/22 08:13

Sample Depth: 0-3'

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102	70 - 130	11/03/22 14:12	11/04/22 19:50	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403 U	0.00403	ma/Ka			11/07/22 15:29	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	33.7		50.0	mg/Kg			11/07/22 11:56	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	50.0	mg/Kg		11/04/22 13:34	11/06/22 04:46	1
Diesel Range Organics (Over C10-C28)	33.7		50.0	mg/Kg		11/04/22 13:34	11/06/22 04:46	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 04:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119	70 - 130	11/04/22 13:3	4 11/06/22 04:46	1
o-Terphenyl	113	70 - 130	11/04/22 13:3	4 11/06/22 04:46	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.3	5.03	mg/Kg			11/04/22 16:20	1

Client Sample ID: SW03 Lab Sample ID: 890-3369-3

Date Collected: 11/02/22 12:35 Date Received: 11/03/22 08:13

Sample Depth: 0-3'

Method: SW846 802	04D Valatila O	!- O
IVIATOOO: SVVXAN XII.	71K - Volatilo Urnan	ic Compolings (GC)

			,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 20:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 20:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 20:11	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/03/22 14:12	11/04/22 20:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 20:11	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/03/22 14:12	11/04/22 20:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			11/03/22 14:12	11/04/22 20:11	1
1 4 Diffusionahan-ana (Cum)	100		70 120			11/02/22 11:12	11/01/22 20:11	1

		·			
4-Bromofluorobenzene (Surr)	116	70 - 130	11/03/22 14:12	11/04/22 20:11	1
1,4-Difluorobenzene (Surr)	102	70 - 130	11/03/22 14:12	11/04/22 20:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00401	U	0.00401	mg/Kg			11/07/22 15:29	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/07/22 11:56	1

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Matrix: Solid

Lab Sample ID: 890-3369-3

11/04/22 16:27

Client Sample Results

Client: Ensolum Job ID: 890-3369-1 Project/Site: Leamex 18 SDG: Lea County NM

Client Sample ID: SW03

Date Collected: 11/02/22 12:35 Date Received: 11/03/22 08:13

Sample Depth: 0-3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 03:42	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 03:42	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/06/22 03:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			11/04/22 13:34	11/06/22 03:42	1
o-Terphenyl	93		70 - 130			11/04/22 13:34	11/06/22 03:42	1
Method: MCAWW 300.0 - Anions	Ion Chromato	ography - S	oluble					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: SW04 Lab Sample ID: 890-3369-4 Date Collected: 11/02/22 12:40 Matrix: Solid

32.4

5.00

mg/Kg

Date Received: 11/03/22 08:13

Sample Depth: 0-3'

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 20:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 20:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 20:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/03/22 14:12	11/04/22 20:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 20:31	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/03/22 14:12	11/04/22 20:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			11/03/22 14:12	11/04/22 20:31	1
1,4-Difluorobenzene (Surr)	104		70 - 130			11/03/22 14:12	11/04/22 20:31	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/07/22 15:29	
			0.0000	mg/rtg			11/01/22 10:20	-
•	ol Pango Organ			mg/Ng			, 0., 22	
: Method: SW846 8015 NM - Diese				Unit	D	Prepared		Dil Fac
•		ics (DRO) (C	GC)		<u>D</u>	Prepared	Analyzed 11/07/22 11:56	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	Result 52.0	ics (DRO) (C	RL 49.8	Unit	<u>D</u>	Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte	Result 52.0 sel Range Orga	ics (DRO) (C	RL 49.8	Unit	<u>D</u>	Prepared Prepared	Analyzed	1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	Result 52.0 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 49.8 (GC)	Unit mg/Kg		<u> </u>	Analyzed 11/07/22 11:56	1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte	Result 52.0 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 49.8 (GC)	Unit mg/Kg		Prepared	Analyzed 11/07/22 11:56 Analyzed	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	Result 52.0 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 49.8 (GC)	Unit mg/Kg		Prepared	Analyzed 11/07/22 11:56 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 52.0 sel Range Orga Result <49.8	Qualifier nics (DRO) Qualifier U	GC) RL 49.8 (GC) RL 49.8	Unit mg/Kg Unit mg/Kg		Prepared 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/06/22 04:25	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 52.0 sel Range Orga Result <49.8 52.0	nics (DRO) (Qualifier Nics (DRO) Qualifier U	GC) RL 49.8 (GC) RL 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/06/22 04:25 11/06/22 04:25	1 Dil Fac 1 1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 52.0 sel Range Orga Result < 49.8 52.0 49.8	nics (DRO) (Qualifier Nics (DRO) Qualifier U	GC) RL 49.8 (GC) RL 49.8 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/04/22 13:34 11/04/22 13:34 11/04/22 13:34	Analyzed 11/07/22 11:56 Analyzed 11/06/22 04:25 11/06/22 04:25	1 Dil Fac 1

Matrix: Solid

Lab Sample ID: 890-3369-4

Client Sample Results

Client: Ensolum Job ID: 890-3369-1 Project/Site: Leamex 18 SDG: Lea County NM

Client Sample ID: SW04

Date Collected: 11/02/22 12:40 Date Received: 11/03/22 08:13

Sample Depth: 0-3'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualific	er RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	30.0	4.98	mg/Kg			11/04/22 16:34	1		

Lab Sample ID: 890-3369-5 **Client Sample ID: SW05** Matrix: Solid

Date Collected: 11/02/22 12:45 Date Received: 11/03/22 08:13

Sample Depth: 0-3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 20:52	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 20:52	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 20:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/03/22 14:12	11/04/22 20:52	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/03/22 14:12	11/04/22 20:52	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/03/22 14:12	11/04/22 20:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/03/22 14:12	11/04/22 20:52	1
1,4-Difluorobenzene (Surr)	98		70 - 130			11/03/22 14:12	11/04/22 20:52	1
- Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	П	0.00396	mg/Kg			11/07/22 15:29	

Method: SW846 8015 NM - Di	esel Range Organ	ics (DRO) (G	C)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/07/22 11:56	1
Method: SW846 8015B NM - D	Diesel Range Orga	nics (DRO) (0	GC)					

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/04/22 13:34	11/06/22 04:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/04/22 13:34	11/06/22 04:04	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/04/22 13:34	11/06/22 04:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			11/04/22 13:34	11/06/22 04:04	1
o-Terphenyl	111		70 - 130			11/04/22 13:34	11/06/22 04:04	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	18.2		5.00	mg/Kg			11/04/22 16:42	1	

Surrogate Summary

Client: Ensolum Job ID: 890-3369-1 Project/Site: Leamex 18 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Accepta
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3368-A-1-A MS	Matrix Spike	117	102	
90-3368-A-1-B MSD	Matrix Spike Duplicate	119	87	
90-3369-1	SW01	117	100	
390-3369-2	SW02	113	102	
390-3369-3	SW03	116	102	
390-3369-4	SW04	107	104	
390-3369-5	SW05	116	98	
_CS 880-38647/1-A	Lab Control Sample	108	99	
LCSD 880-38647/2-A	Lab Control Sample Dup	109	101	
MB 880-38647/5-A	Method Blank	89	101	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Sample ID	Client Sample ID	(70-130)	(70-130)	
-3368-A-1-F MS	Matrix Spike	99	85	
-3368-A-1-G MSD	Matrix Spike Duplicate	95	81	
3369-1	SW01	128	118	
369-2	SW02	119	113	
369-3	SW03	101	93	
369-4	SW04	111	106	
369-5	SW05	111	111	
880-38741/2-A	Lab Control Sample	96	101	
O 880-38741/3-A	Lab Control Sample Dup	95	99	
80-38741/1-A	Method Blank	96	106	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-3369-1 Client: Ensolum Project/Site: Leamex 18 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38647/5-A

Matrix: Solid Analysis Batch: 38705

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38647

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/03/22 14:12	11/04/22 13:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/03/22 14:12	11/04/22 13:21	1

MB MB

MB MB

Surrogate	%Recovery Qualif	ier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89	70 - 130	11/03/22 14:12	11/04/22 13:21	1
1,4-Difluorobenzene (Surr)	101	70 ₋ 130	11/03/22 14:12	11/04/22 13:21	1

Lab Sample ID: LCS 880-38647/1-A

Matrix: Solid

Analysis Batch: 38705

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 38647

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09434 mg/Kg 94 70 - 130 Toluene 0.100 0.1036 mg/Kg 104 70 - 130 Ethylbenzene 0.100 0.1062 mg/Kg 106 70 - 130 70 - 130 0.200 0.1880 94 m-Xylene & p-Xylene mg/Kg 0.100 o-Xylene 0.09220 mg/Kg 92 70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-38647/2-A

Matrix: Solid

Analysis Batch: 38705

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 38647

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.09800 mg/Kg 98 70 - 130 35 Toluene 0.100 0.1092 mg/Kg 109 70 - 130 5 35 Ethylbenzene 0.100 0.1055 mg/Kg 106 70 - 130 35 m-Xylene & p-Xylene 0.200 0.1858 mg/Kg 93 70 - 130 35 0.100 o-Xylene 0.09101 mg/Kg 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-3368-A-1-A MS

Matrix: Solid

Analysis Batch: 38705

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

Prep Batch: 38647

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <0.00202 U F1 F2 0.0998 0.005779 F1 6 Benzene mg/Kg 70 - 130 Toluene <0.00202 U F1 F2 0.0998 0.003954 F1 mg/Kg 4 70 - 130

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Page 10 of 23

QC Sample Results

Client: Ensolum Job ID: 890-3369-1 Project/Site: Leamex 18 SDG: Lea County NM

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

Lab Sample ID: 890-3368-A-1-A MS

Matrix: Solid

Analysis Batch: 38705

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38647

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00202 U F1 F2 0.0998 0.003555 F1 4 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00403 U F1 F2 0.200 0.009125 F1 mg/Kg 5 70 - 130 0.0998 o-Xylene <0.00202 U F1 F2 0.006871 F1 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	117	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 38647

Lab Sample ID: 890-3368-A-1-B MSD **Matrix: Solid**

Analysis Batch: 38705

MSD MSD Sample Sample Spike RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.0990 Benzene <0.00202 U F1 F2 0.07647 F2 mg/Kg 77 70 - 130 172 35 Toluene <0.00202 U F1 F2 0.0990 0.09996 F2 mg/Kg 101 70 - 130 185 35 Ethylbenzene <0.00202 U F1 F2 0.0990 0.09454 F2 95 70 - 130 186 35 mg/Kg <0.00403 U F1 F2 0.198 0.1686 F2 70 - 130 m-Xylene & p-Xylene mg/Kg 85 179 35 0.0990 <0.00202 U F1 F2 0.08234 F2 83 70 - 130 169 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

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

Lab Sample ID: MB 880-38741/1-A

Matrix: Solid

Analysis Batch: 38768

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

Prep Batch: 38741

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/05/22 20:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/05/22 20:56	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/22 13:34	11/05/22 20:56	1

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	11.	1/04/22 13:34	11/05/22 20:56	1
o-Terphenyl	106		70 - 130	11.	1/04/22 13:34	11/05/22 20:56	1

Lab Sample ID: LCS 880-38741/2-A

Matrix: Solid

Analysis Batch: 38768

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38741

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	824.1		mg/Kg		82	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1033		mg/Kg		103	70 - 130	
C10-C28)								

Job ID: 890-3369-1 SDG: Lea County NM

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

Lab Sample ID: LCS 880-38741/2-A

Matrix: Solid

Client: Ensolum Project/Site: Leamex 18

Analysis Batch: 38768

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38741

LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 96 70 - 130 o-Terphenyl 101 70 - 130

Lab Sample ID: LCSD 880-38741/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 38768

Prep Type: Total/NA

Prep Batch: 38741

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 818.0 82 70 - 130 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 986.9 mg/Kg 99 70 - 1305 20 C10-C28)

LCSD LCSD

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

Lab Sample ID: 890-3368-A-1-F MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 38768

Prep Type: Total/NA

Prep Batch: 38741

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<50.0	U	997	788.7		mg/Kg		79	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<50.0	U	997	955.5		mg/Kg		92	70 - 130	
C10 C28)										

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 99 o-Terphenyl 85 70 - 130

Lab Sample ID: 890-3368-A-1-G MSD Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 38768

Prep Type: Total/NA

Prep Batch: 38741

	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	999	787.1		mg/Kg		79	70 - 130	0	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	999	900.2		mg/Kg		87	70 - 130	6	20
C10-C28)											

Matrix: Solid

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	95	70 - 130
o-Terphenyl	81	70 - 130

QC Sample Results

Client: Ensolum Job ID: 890-3369-1 Project/Site: Leamex 18 SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38711/1-A

Matrix: Solid

Analysis Batch: 38737

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

MB MB Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/04/22 13:05

Lab Sample ID: LCS 880-38711/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38737

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 251.2 mg/Kg 100 90 - 110

Lab Sample ID: LCSD 880-38711/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38737

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 253.4 101 mg/Kg 90 - 110

Lab Sample ID: 890-3366-A-12-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 38737

Spike MS MS Sample Sample %Rec Analyte Result Qualifier Added Qualifier %Rec Result Unit Limits Chloride 30.8 251 287.5 102 90 - 110 mg/Kg

Lab Sample ID: 890-3366-A-12-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 38737

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 251 30.8 285.9 mg/Kg 102 90 - 110 20

Eurofins Carlsbad

Prep Type: Soluble

QC Association Summary

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3369-1

SDG: Lea County NM

GC VOA

Prep Batch: 38647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-1	SW01	Total/NA	Solid	5035	
890-3369-2	SW02	Total/NA	Solid	5035	
890-3369-3	SW03	Total/NA	Solid	5035	
890-3369-4	SW04	Total/NA	Solid	5035	
890-3369-5	SW05	Total/NA	Solid	5035	
MB 880-38647/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38647/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38647/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3368-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-3368-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-1	SW01	Total/NA	Solid	8021B	38647
890-3369-2	SW02	Total/NA	Solid	8021B	38647
890-3369-3	SW03	Total/NA	Solid	8021B	38647
890-3369-4	SW04	Total/NA	Solid	8021B	38647
890-3369-5	SW05	Total/NA	Solid	8021B	38647
MB 880-38647/5-A	Method Blank	Total/NA	Solid	8021B	38647
LCS 880-38647/1-A	Lab Control Sample	Total/NA	Solid	8021B	38647
LCSD 880-38647/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38647
890-3368-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	38647
890-3368-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38647

Analysis Batch: 38898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-1	SW01	Total/NA	Solid	Total BTEX	
890-3369-2	SW02	Total/NA	Solid	Total BTEX	
890-3369-3	SW03	Total/NA	Solid	Total BTEX	
890-3369-4	SW04	Total/NA	Solid	Total BTEX	
890-3369-5	SW05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-1	SW01	Total/NA	Solid	8015NM Prep	
890-3369-2	SW02	Total/NA	Solid	8015NM Prep	
890-3369-3	SW03	Total/NA	Solid	8015NM Prep	
890-3369-4	SW04	Total/NA	Solid	8015NM Prep	
890-3369-5	SW05	Total/NA	Solid	8015NM Prep	
MB 880-38741/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38741/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38741/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3368-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3368-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-1	SW01	Total/NA	Solid	8015B NM	38741
890-3369-2	SW02	Total/NA	Solid	8015B NM	38741

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QC Association Summary

Client: Ensolum Job ID: 890-3369-1 Project/Site: Leamex 18 SDG: Lea County NM

GC Semi VOA (Continued)

Analysis Batch: 38768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-3	SW03	Total/NA	Solid	8015B NM	38741
890-3369-4	SW04	Total/NA	Solid	8015B NM	38741
890-3369-5	SW05	Total/NA	Solid	8015B NM	38741
MB 880-38741/1-A	Method Blank	Total/NA	Solid	8015B NM	38741
LCS 880-38741/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38741
LCSD 880-38741/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38741
890-3368-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	38741
890-3368-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38741

Analysis Batch: 38876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-1	SW01	Total/NA	Solid	8015 NM	
890-3369-2	SW02	Total/NA	Solid	8015 NM	
890-3369-3	SW03	Total/NA	Solid	8015 NM	
890-3369-4	SW04	Total/NA	Solid	8015 NM	
890-3369-5	SW05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-1	SW01	Soluble	Solid	DI Leach	
890-3369-2	SW02	Soluble	Solid	DI Leach	
890-3369-3	SW03	Soluble	Solid	DI Leach	
890-3369-4	SW04	Soluble	Solid	DI Leach	
890-3369-5	SW05	Soluble	Solid	DI Leach	
MB 880-38711/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38711/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38711/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3366-A-12-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3366-A-12-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3369-1	SW01	Soluble	Solid	300.0	38711
890-3369-2	SW02	Soluble	Solid	300.0	38711
890-3369-3	SW03	Soluble	Solid	300.0	38711
890-3369-4	SW04	Soluble	Solid	300.0	38711
890-3369-5	SW05	Soluble	Solid	300.0	38711
MB 880-38711/1-A	Method Blank	Soluble	Solid	300.0	38711
LCS 880-38711/2-A	Lab Control Sample	Soluble	Solid	300.0	38711
LCSD 880-38711/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38711
890-3366-A-12-C MS	Matrix Spike	Soluble	Solid	300.0	38711
890-3366-A-12-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38711

SDG: Lea County NM

Client Sample ID: SW01

Project/Site: Leamex 18

Client: Ensolum

Lab Sample ID: 890-3369-1

Matrix: Solid

Date Collected: 11/02/22 12:25 Date Received: 11/03/22 08:13

	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 19:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38898	11/07/22 15:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38876	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 03:21	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38711	11/04/22 10:43	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38737	11/04/22 16:13	CH	EET MID

Client Sample ID: SW02 Lab Sample ID: 890-3369-2 Matrix: Solid

Date Collected: 11/02/22 12:30 Date Received: 11/03/22 08:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 19:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38898	11/07/22 15:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38876	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 04:46	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	38711	11/04/22 10:43	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38737	11/04/22 16:20	CH	EET MID

Client Sample ID: SW03 Lab Sample ID: 890-3369-3

Date Collected: 11/02/22 12:35 **Matrix: Solid** Date Received: 11/03/22 08:13

	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 20:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38898	11/07/22 15:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38876	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 03:42	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38711	11/04/22 10:43	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38737	11/04/22 16:27	CH	EET MID

Client Sample ID: SW04 Lab Sample ID: 890-3369-4 Date Collected: 11/02/22 12:40 **Matrix: Solid**

Date Received: 11/03/22 08:13

	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 20:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38898	11/07/22 15:29	AJ	EET MID

Lab Chronicle

Client: Ensolum Job ID: 890-3369-1 Project/Site: Leamex 18 SDG: Lea County NM

Client Sample ID: SW04

Date Received: 11/03/22 08:13

Lab Sample ID: 890-3369-4 Date Collected: 11/02/22 12:40

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			38876	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 04:25	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38711	11/04/22 10:43	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38737	11/04/22 16:34	CH	EET MID

Client Sample ID: SW05 Lab Sample ID: 890-3369-5

Date Collected: 11/02/22 12:45 Matrix: Solid

Date Received: 11/03/22 08:13

	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	38647	11/03/22 14:12	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38705	11/04/22 20:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38898	11/07/22 15:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38876	11/07/22 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38741	11/04/22 13:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38768	11/06/22 04:04	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38711	11/04/22 10:43	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38737	11/04/22 16:42	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3369-1

SDG: Lea County NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report hi	it the laboratory is not certific	ed by the governing authority. This list ma	y include analytes for y
the agency does not of	. ,	it the laboratory is not contin	ou by the governing authority. This list his	ay include analytes for t
0 ,	. ,	Matrix	Analyte	y include analytes for v
the agency does not of	fer certification.	•	, , ,	

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Method Summary

Client: Ensolum Project/Site: Leamex 18 Job ID: 890-3369-1

SDG: Lea County NM

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ol	Laboratory	
	EET MID	
Р	EET MID	

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: Leamex 18

Job ID: 890-3369-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3369-1	SW01	Solid	11/02/22 12:25	11/03/22 08:13	0-3'
890-3369-2	SW02	Solid	11/02/22 12:30	11/03/22 08:13	0-3'
890-3369-3	SW03	Solid	11/02/22 12:35	11/03/22 08:13	0-3'
890-3369-4	SW04	Solid	11/02/22 12:40	11/03/22 08:13	0-3'
890-3369-5	SW05	Solid	11/02/22 12:45	11/03/22 08:13	0-3'

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Environment Testing

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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

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Work Order Comments	www.xenco.com	Work Order No:
mments	Page 1	

Received by: (Signature)	Relinquished by: (Signature)	ime	Date/Time		ire)	Received by: (Signature)	Received		Relinquished by: (Signature)	Relinquished
tractors. It assigns standard terms and conditions losses are due to circumstances beyond the control se terms will be enforced unless previously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	o Eurofins Xendor expenses in d to Eurofins X	ompany in losses submitte	n client o ility for a h sample	rchase order fro le any responsit rge of \$5 for eac	titutes a valid pur d shall not assum project and a cha	f samples const of samples and pplied to each p	Inquishment only for the cost	his document and r (enco will be llable minimum charge of	Notice: Signature of to service. Eurofins of Eurofins Xenco. A
Ag TI U Hg: 1631 / 245.1 / /4/0 / /4/1	Cr Co Cu Pb Mr	As Ba Be Cd	Sb As	113	TCLP / SPLP 6010: 8RCRA	TCLP / SPI	ed	o be analyz	and Metal(s)	Circle Method(s) and Metal(s) to be analyzed
Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	Cd Ca Cr Co Cu Fe Pb Mg Mn	Ве В	Sb As Ba	A	M Texas 1	8RCRA 13PPM Texas 11 AI Sb	85	200.8 / 6020:		Total 200.7 / 6010
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		×	×		-3 ₁	1235 0	11.2.22	S	W03	S
		×	×	-	-3 ¹ C	1230 0	11.2.22	S	W02	S
		×	×		-3' C	1225 0	11.2.22	S	W01	S
Sa		-	CHLO	# of		Time Sampled	Date Sampled	Matrix	dentification	Sample I
Nacci	890-3369	-	RIDE		7,0	mperature:	Corrected Te	(Total Containers:
Zn Aceta	Co Chain of Custody	1	S (E		9	Reading:	Temperature	No (N/A)	Seals: Yes	Sample Custody Seals
			PA:	P	C-0-2	actor:	Correction Fa	多	eals: Yes	Cooler Custody Seals:
NaHSO ₄			300	arar	27.00	Ü.	Thermometer			Samples Received Intact:
H ₃ PO ₄ : H			.0)	nete	√eg No	Wet Ice:	Yes No	ηρ Blank:		SAMPLE REC
H ₂ SO ₄ : H		-		rs	ved by 4:30pm	the lab, if receive)			PO#:
HCC: HC					day received by	TAT starts the c		onner Shore	0	Sampler's Name
Cool: Co					148h	_		County, N	Le	Project Location:
None: NO				Code	X Rush	✓ Routine		3D2057028	0	Project Number:
Pre	ANALYSIS REQUEST				round	Turn A		_eamex 18		Project Name:
mp see	None: NO DI Water: H. Cool: Cool MeOH: Me HCL: HC HO HNO3: HN H ₂ S04: H ₂ NaOH: Na H ₃ PO4: HP NaHSO4: NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC Sample Comments Cost Code- GA130323 AFE 000000000471	None Cool HCL H ₂ S0 Na ₂ S Zn A Na ₂ O	ANALYSIS REQUEST None Cool HCL H ₂ SI Nah Na ₂ S Nah Na ₂ S Nah NaC NaC Nah NaC	ANALYSIS REQUEST None Cool HCL H ₂ SO NaH Na ₂ SO NaC NaC NaC NaC NaC NaC NaC Na	ANALYSIS REQUEST None Code Code Code Code Code Code Code Cod	ANALYSIS REQUEST None Code Parameters Code Parameters None Cool HCL HCL H2SO NAH H3PO NAH NA2SO NAA NAA NAA NAA NAA NAA NAA NAA NAA NA	ANALYSIS REQUEST None Lith day received by 4 30pm	Turn Around Pres. Analysis requiest None	ANALYSIS REQUEST None Nath Pres. None Nath N	Learnex 18

Phone: City, State ZIP:

Project Manager:

Josh Adams

Bill to: (if different)

Ensolum, LLC

Midland, TX 79701

Email: kjennings@ensolum.com

City, State ZIP: Address: Company Name:

Midland, TX 79701

601 N Warienfeld St Suite 400

State of Project:

Reporting: Level III Devel III PST/UST TRRP

Level IV

ADaPT 🗆

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

Deliverables: EDD

Ensolum, LLC Kalei Jennings

601 N Marienfeld St Suite 400

Address: Company Name:

Revised Date 08/25/2020 Rev 2020 2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3369-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 3369 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	

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3369-1 SDG Number: Lea County NM

Login Number: 3369 **List Source: Eurofins Midland** List Number: 2

List Creation: 11/04/22 10:22 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	

Released to Imaging: 1/11/2023 2:28:21 PM

<6mm (1/4").



APPENDIX E

NMOCD Notifications

From: Enviro, OCD, EMNRD

To: Kalei Jennings

Cc: Nobui, Jennifer, EMNRD; Bratcher, Michael, EMNRD

Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 11/28/2022)

Date: Wednesday, November 23, 2022 2:34:36 PM

Attachments: <u>image005.jpg</u> <u>image006.png</u>

image000.png image008.png image009.png

[**EXTERNAL EMAIL**]

Please be aware that notification requirements are **two business days**, per rule. Please proceed on your schedule. Also, please include this, and all correspondence, in the closure report to insure inclusion in the project file.

Many thanks and happy holidays!

Jocelyn Harimon • Environmental Specialist

Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov

http://www.emnrd.nm.gov



From: Kalei Jennings < kjennings@ensolum.com> **Sent:** Wednesday, November 23, 2022 1:23 PM

To: Enviro, OCD, EMNRD < OCD. Enviro@emnrd.nm.gov>

Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 11/28/2022)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

On behalf of Maverick Natural Resources, LLC we respectfully submit notification of sampling to be conducted at the below location the week of 11/28/2022.

Leamex 8 / Incident Number NAPP2200641724 Leamex 018 / Incident Number NAPP2229947721

Thank you,



Kalei Jennings Senior Scientist 817-683-2503 Ensolum, LLC

From: <u>Nobui, Jennifer, EMNRD</u>

To: <u>Kalei Jennings</u>

Cc: <u>Bratcher, Michael, EMNRD</u>

Subject: FW: [EXTERNAL] Maverick- Sampling Notification (Week of 10/31/2022)

Date: Wednesday, October 26, 2022 4:04:54 PM

Attachments: <u>image001.png</u>

image002.png image003.png image004.png image005.jpg

[**EXTERNAL EMAIL**]

Kalei

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,

Jennifer Nobui

From: Enviro, OCD, EMNRD < OCD. Enviro@emnrd.nm.gov>

Sent: Wednesday, October 26, 2022 3:58 PM

To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD

<Jennifer.Nobui@emnrd.nm.gov>

Subject: FW: [EXTERNAL] Maverick- Sampling Notification (Week of 10/31/2022)

Jocelyn Harimon • Environmental Specialist

Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@state.nm.us

http://www.emnrd.nm.gov



From: Kalei Jennings < kjennings@ensolum.com > Sent: Wednesday, October 26, 2022 3:37 PM

To: Enviro, OCD, EMNRD < OCD. Enviro@emnrd.nm.gov>

Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 10/31/2022)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

On behalf of Maverick Natural Resources, LLC we respectfully submit notification of sampling to be conducted at the below locations the week of 10/31/2022.

Leamex 8 / Incident Number NAPP2200641724 MCA 145 / Incident Number NAPP2229469315 Leamex 018 / Incident Number NAPP2229947721

Thank you,



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 167178

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	167178
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
jnobui	Closure Report Approved.	1/11/2023