

August 26, 2022

District 1 New Mexico Oil Conservation Division 1625 North French Drive Hobbs. New Mexico 88240

Re: Closure Request

**EVGSAU 3202-385** 

**Incident Number NAPP2207331663** 

Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Natural Resources, LLC (Maverick), has prepared this Closure Request to document site assessment, excavation, and soil sampling activities performed at the EVGSAU 3202-385 (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of crude oil and produced water at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, Maverick is submitting this Closure Request, describing remediation that has occurred and requesting closure for Incident Number NAPP2207331663.

### SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit J, Section 32, Township 17 South, Range 35 East, in Lea County, New Mexico (32.788333° N, 103.47861° W) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On February 27, 2022, a flowline failure resulted in the release of approximately 4.1 barrels (bbls) of produced water and 0.9 bbls of crude oil onto the surface of the well pad. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 1.64 bbls of produced water and 0.36 bbls of crude oil were recovered. The previous operator, ConocoPhillips Company, reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on March 14, 2022. The release was assigned Incident Number NAPP2207331663.

### SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is estimated to be between 51 feet and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well L-04829-S, located

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants
601 North Marienfeld Street | Midland, TX 79701 | ensolum.com
Texas PG Firm No. 50588 | Texas PE Firm No. F-21843

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approximately 0.19 miles southeast of the Site. The well was converted into a production well and not a water well. The groundwater well has a reported depth to groundwater of 85 feet bgs and a total depth of 198 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well record is included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a freshwater pond, located approximately 1,123 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, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

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

• TPH: 2,500 mg/kg

Chloride: 10,000 mg/kg

### **DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS**

On May 26, 2022, Ensolum personnel were at the Site to complete site assessment and delineation activities based on information provided on the Form C-141 and visible surface staining observed in the release area. Five preliminary assessment soil samples (SS01 through SS05) were collected within the release extent at a depth of 0.2 feet bgs to assess for the presence or absence of impacted soil. Additionally, six lateral delineation soil samples (SS06 through SS11) were collected around the release extent at a depth of 0.5 feet bgs to confirm the lateral extent of the release. Soil samples were field screened for volatile aromatic hydrocarbons utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the each Site visit and a photographic log is included in Appendix C.

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

Laboratory analytical results for preliminary assessment soil samples SS01, SS02, SS04, and SS05 indicated TPH-GRO/TPH-DRO and/or TPH concentrations exceeded the Site Closure Criteria. Laboratory analytical results for preliminary soil sample SS03 indicated concentrations of all chemicals of concern (COCs) were compliant with the Site Closure Criteria. Laboratory analytical results for lateral delineation soil samples SS06 through SS011 indicated concentrations of all COC were compliant with the Site Closure Criteria and compliant with the most stringent Table 1 Closure Criteria and successfully define the lateral extent of the release.



Maverick Natural Resources, LLC Closure Request EVGSAU 3202-385 August 26, 2022

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Based on visible staining in the release area and laboratory analytical results for preliminary soil samples SS01, SS02, SS04, and SS05, excavation activities were warranted.

### **EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS**

Between August 3 and 11, 2022, Ensolum personnel were at the Site to oversee excavation activities based on visible staining in the release area and laboratory analytical results for preliminary assessment soil samples SS01, SS02, SS04, and SS05. Excavation activities were performed via hand shoveling and hydrovac. To direct excavation activities, soil was field screened for volatile aromatic hydrocarbons and chloride.

Following the excavation activities, 5-point composite samples were collected from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS07 were collected from the floor of the excavation at a depth of 0.5 feet bgs. Due to the shallow depth of the excavation, soil from the sidewalls was incorporated into the floor samples. 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 GPS unit and are depicted on Figure 3. A photographic log of the excavation is included as Appendix C.

Laboratory analytical results for excavation soil samples FS01 through FS07, collected from the final excavation extent, indicated concentrations of all COCs were compliant with the Site Closure Criteria. Laboratory analytical reports are included as Appendix D.

The excavation measured approximately 1,371 square feet in areal extent. A total of approximately 25 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Disposal Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

### **CLOSURE REQUEST**

Site assessment and excavation activities were conducted at the Site to address the February 27, 2022, release of produced water and crude oil. Laboratory analytical results for the excavation soil samples indicated concentrations of all COCs were compliant with the Site Closure Criteria. Based on the laboratory analytical results, no further remediation was required. Maverick will backfill the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions.

Excavation of impacted soil has mitigated adverse conditions at this Site. Depth to groundwater has been estimated to be between 51 feet and 100 feet bgs and no sensitive receptors were identified near the release extent. Maverick believes these remedial actions are protective of human health, the environment, and groundwater and respectfully requests closure for Incident NAPP2207331663. NMOCD notifications are included as Appendix E.



Maverick Natural Resources, LLC Closure Request EVGSAU 3202-385 August 26, 2022

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

Sincerely, **Ensolum, LLC** 

Kalei Jennings Senior Scientist Daniel, R. Moir, PG Senior Managing Geologist

cc: Bryce Wagoner, Maverick Natural Resources

New Mexico State Land Office

### Attachments:

Figure 1 Site Receptor Map

Figure 2 Preliminary 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

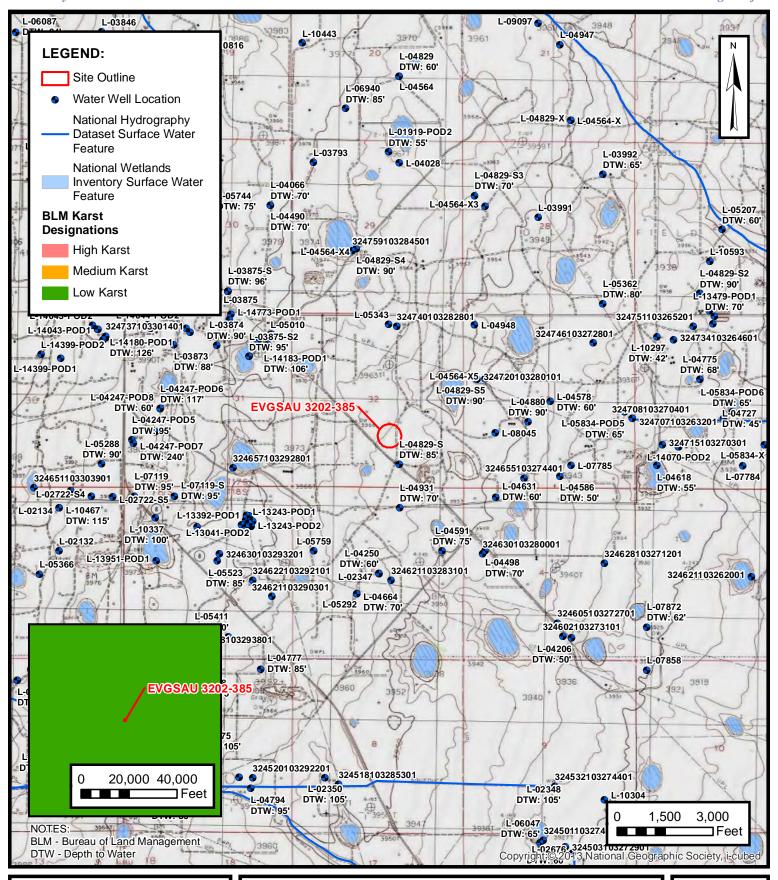
Appendix C Photographic Log

Appendix D Laboratory Analytical Reports

Appendix E NMOCD Notifications



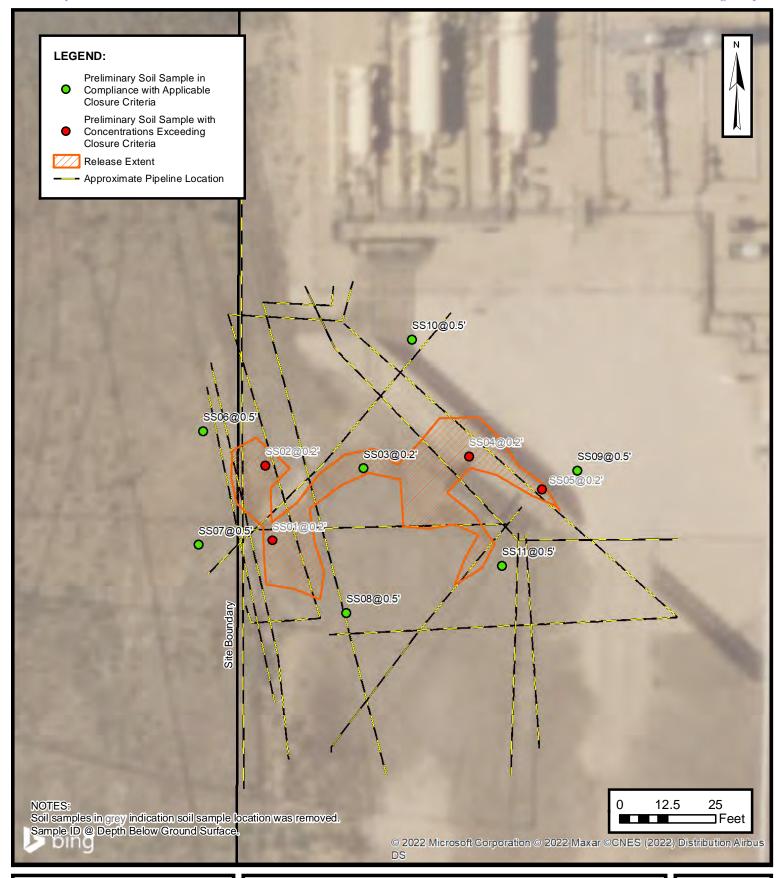
**FIGURES** 





### SITE RECEPTOR MAP

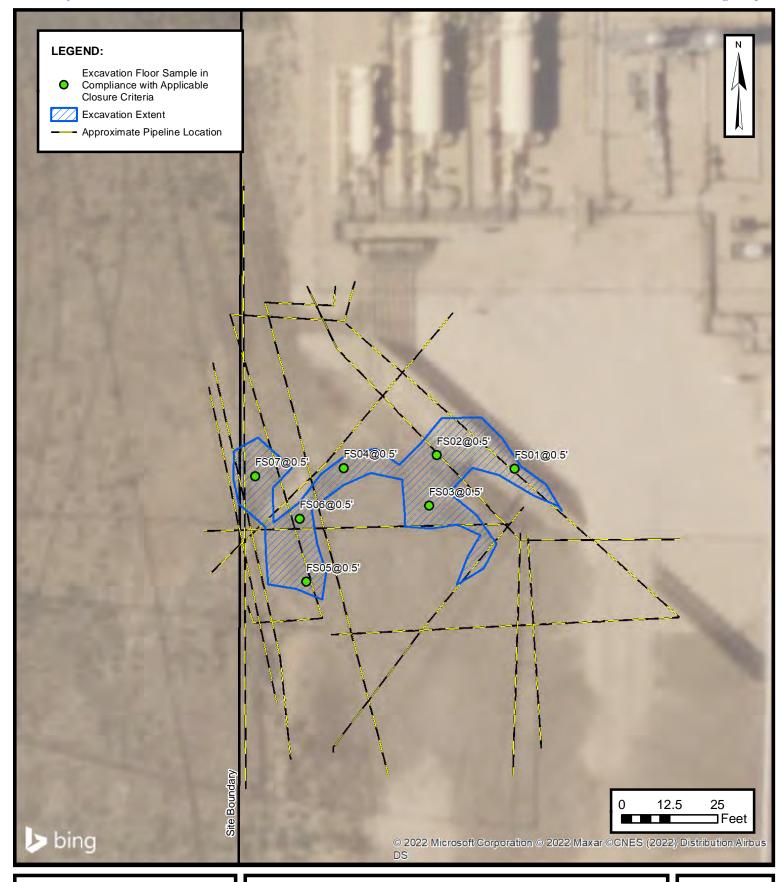
MAVERICK NATURAL RESOURCES, LLC EVGSAU 3202-385 NAPP2207331663 Unit J, Sec 32, T175, R35E Lea County, New Mexico **FIGURE** 





### PRELIMINARY SOIL SAMPLE LOCATIONS

MAVERICK NATURAL RESOURCES, LLC EVGSAU 3202-385 NAPP2207331663 Unit J, Sec 32, T17S, R35E Lea County, New Mexico **FIGURE** 





### **EXCAVATIONSOIL SAMPLE LOCATIONS**

MAVERICK NATURAL RESOURCES, LLC EVGSAU 3202-385 NAPP2207331663 Unit J, Sec 32, T17S, R35E Lea County, New Mexico **FIGURE** 



**TABLE** 



### TABLE 1

### SOIL SAMPLE ANALYTICAL RESULTS

**EVGSAU 3202-385** 

**Maverick Natural Resources, LLC** 

Lea County, New Mexico

				Loa	County, New Me	XIOO				
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1	Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	10,000
				Preliminary	y Assessment So	oil Samples				
SS01	5/26/2022	0.2	<0.0200	<0.0399	61.3	3,740	934	3,801	4,740	4,170
SS02	5/26/2022	0.2	<0.0402	<0.0803	<250	8,990	2,740	8,990	11,700	4,080
SS03	5/26/2022	0.2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	2,430
SS04	5/26/2022	0.2	<0.0202	<0.0403	<49.9	1,050	274	1,050	1,320	5,660
SS05	5/26/2022	0.2	<0.0398	30.7	1,150	15,400	3,730	16,550	20,300	95.3
SS06	5/26/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	63.3
SS07	5/26/2022	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	201
SS08	5/26/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	203
SS09	5/26/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	79.3
SS10	5/26/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	184
SS11	5/26/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	66.9
				Exc	avation Soil Sam	ples				
FS01	8/10/2022	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	2,060
FS02	8/11/2022	0.5	<0.00200	<0.00400	<49.9	245	<49.9	245	245	3,750
FS03	8/11/2022	0.5	<0.00200	<0.00400	<50.0	132	<50.0	132	132	1,510
FS04	8/11/2022	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	1,690
FS05	8/10/2022	0.5	<0.00200	<0.00400	<50.0	55.6	<50.0	55.6	55.6	901
FS06	8/10/2022	0.5	<0.00200	<0.00400	<49.9	267	<49.9	267	267	487
FS07	8/11/2022	0.5	<0.00200	<0.00400	<49.8	58.3	<49.8	58.3	58.3	1,460

### Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

Grey text represents samples that have been excavated



**APPENDIX A** 

Final C141

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

State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	
District RP	
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

Responsible Party				OGRID	OGRID			
Contact Nam	ne			Contact Te	Contact Telephone			
Contact ema	Contact email				Incident # (assigned by OCD)			
Contact mail	ing address			1				
			Location	of Release Se	ource			
<b>.</b>								
Latitude			(NAD 83 in de	Longitude _ cimal degrees to 5 decin	nal places)			
Site Name				Site Type				
Date Release	Discovered			API# (if app	olicable)			
Unit Letter	Section	Township	Range	Cour	nty	7		
Crude Oi		l(s) Released (Select al Volume Release	ll that apply and attach	d Volume of l		e volumes provided below) overed (bbls)		
Produced	Water	Volume Release	ed (bbls)		Volume Recovered (bbls)			
		Is the concentrate produced water	tion of dissolved c >10,000 mg/l?	chloride in the	ride in the Yes No			
Condensa	nte	Volume Release			Volume Reco	overed (bbls)		
Natural G	ias	Volume Release	ed (Mcf)		Volume Recovered (Mcf)			
Other (describe) Volume/Weight Released (provide uni			e units)	Volume/Wei	ght Recovered (provide units)			
Cause of Rel	ease							

Received by OCD: 8/26/2022 11558:26 AM State of New Mexico
Page 2 Oil Conservation Division

P	ag	<b>P</b> d	36	of	1	23

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the re	sponsible party consider this a major release?
19.15.29.7(A) NMAC?		
☐ Yes ☐ No		
IfVEC i 1:-4	4:: 4- 4- OCD2 D12 T	o whom? When and by what means (phone, email, etc)?
II 1 ES, was ininediate no	once given to the OCD? By whom?	o whom? when and by what means (phone, email, etc)?
	Initial	Response
The responsible p	party must undertake the following actions immed	diately unless they could create a safety hazard that would result in injury
☐ The source of the rele	ase has been stopped.	
☐ The impacted area ha	s been secured to protect human health	and the environment.
☐ Released materials ha	we been contained via the use of berms	or dikes, absorbent pads, or other containment devices.
	ecoverable materials have been remove	
If all the actions described	l above have <u>not</u> been undertaken, expl	ain why:
has begun, please attach	a narrative of actions to date. If remed	ace remediation immediately after discovery of a release. If remediation dial efforts have been successfully completed or if the release occurred C), please attach all information needed for closure evaluation.
regulations all operators are public health or the environment failed to adequately investigation	required to report and/or file certain release nent. The acceptance of a C-141 report by ate and remediate contamination that pose a	the best of my knowledge and understand that pursuant to OCD rules and notifications and perform corrective actions for releases which may endanger the OCD does not relieve the operator of liability should their operations have a threat to groundwater, surface water, human health or the environment. In or of responsibility for compliance with any other federal, state, or local laws
Printed Name	_	Title:
Signature:	tanigoparne -	Date:
email:		Telephone:
OCD Only		
Received by:Jocelyn	Harimon	Date: _03/14/2022

n : 11 och	0/26/2022	# 15 5 0 4 2 C 4 1 3 A		L48 Spill Vo	lume Estimate Form			NAPP22073	3166314 7102	
Received by OCD: 8/26/2022 11:58:26 AM			EVGSAU 3202-38					14/11 1 22010	NAPP220733166314 of 123	
		Asset Area: I	BUCKEYE							
	Release Discov	very Date & Time:	2-27-22 11:30AM							
		Release Type:	Oil Mixture							
Provide at	ny known details	s about the event:	LEAK ON 2 7/8 ST	EEL FLOW LINE BY SATELLITE 3 C	ON WELL 3202-385					
				Spill Calculation -	Subsurface Spill - Rectangle					
Wa	as the release o	n pad or off-pad?			On Pad - 10.5%; Off Pad - 15.12%	soil spilled-fluid satu	uration factor			
Has it rained at leas	st a half inch in t	the last 24 hours?		Yes, On P	ad - 8%; Off Pad - 13.57% soil spilled-f	fluid saturation facto	r; if No, use factors ab	ove.		
Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)	
Rectangle A	35.0	6.0	1.50	15.12%	4.673	0.706	18.00%	0.127	0.579	
Rectangle B	28.0	18.0	1.50	15.12%	11.214	1.696	18.00%	0.305	1.390	
Rectangle C	20.0	15.0	2.00	15.12%	8.900	1.346	18.00%	0.242	1.103	
Rectangle D	21.0	10.0	2.00	15.12%	6.230	0.942	18.00%	0.170	0.772	
Rectangle E	10.0	6.0	2.00	15.12%	1.780	0.269	18.00%	0.048	0.221	
Rectangle F	27.0	1.0	1.00	15.12%	0.401	0.061	18.00%	0.011	0.050	
Rectangle G					0.000	0.000		0.000	0.000	
Rectangle H					0.000	0.000		0.000	0.000	
Rectangle I					0.000	0.000		0.000	0.000	
Released to Imagi	ng: 8/31/202	22 3:50:18 PM	1		0.000	0.000		0.000	0.000	
	0				Total Volume Release:	5.019		0.903	4.116	

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 89906

### **CONDITIONS**

Operator:	OGRID:
CONOCOPHILLIPS COMPANY	217817
600 W. Illinois Avenue	Action Number:
Midland, TX 79701	89906
	Action Type:
	[C-141] Release Corrective Action (C-141)

### CONDITIONS

Created By		Condition Date
jharimon	None	3/14/2022

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Incident ID	NAPP2207331663	
District RP		
Facility ID		
Application ID		

# **Site Assessment/Characterization**

This information must be provided to the appropriate district office no taler than 20 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release?	50-100 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?	☐ 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 <b>not</b> on an exploration, development, production, or storage site?	Yes X No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
<ul> <li>Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wel</li> <li>Field data</li> <li>□ Data table of soil contaminant concentration data</li> </ul>	ls.

Cha	racterization Report Checklist: Each of the following items must be included in the report.
$\times$	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: 8/26/2022 11:58:26 AM Form C-141 State of New Mexico Page 4 Oil Conservation Division

	ruge 1/ 0j 12
Incident ID	NAPP2207331663
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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 th addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	och 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	Title: HSE Specialist
Signature:	Date:
email:bryce.wagner@mavresouces.com	Telephone:928-241-1862
OCD Only	
Received by: Jocelyn Harimon	Date: 08/30/2022

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Application ID		

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.							
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>							
<u>Deferral Requests Only</u> : Each of the following items must be confirmed as part of any request for deferral of remediation.							
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.							
Extents of contamination must be fully delineated.							
Contamination does not cause an imminent risk to human health, the environment, or groundwater.							
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.							
Printed Name: Bryce Wagoner Title: _HSE Specialist							
Signature: Date:							
email: _bryce.wagoner@mavresources.com Telephone:928-241-1862							
OCD Only							
Received by: Jocelyn Harimon Date: 08/30/2022							
Approved							
Signature: Date:							



**APPENDIX B** 

Referenced Well Records



# New Mexico Office of the State Engineer

# **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number

(quarters are smallest to largest)

D83 O I WI III IIIetels)

Wen rag 10D Number

Q64 Q16 Q4 Sec Tws Rng

X Y

L 04829 S

3 4 32 17S 35E

642554 3628586\*

36\*

**Driller License:** 46

**Driller Company:** 

ABBOTT BROTHERS COMPANY

**Driller Name:** MURRELL ABBOTT

05/04/1979

**Drill Finish Date:** 

05/14/1979

**Plug Date:** 

Log File Date:

06/06/1979

**PCW Rcv Date:** 

06/06/1979

Source:

Shallow

Pump Type:

**Drill Start Date:** 

TURBIN

Pipe Discharge Size:

**Estimated Yield:** 

**Casing Size:** 

12.75

Depth Well:

198 feet

Depth Water:

85 feet

Water Bearing Stratifications:

**Top Bottom Description** 

85

198 Sandstone/Gravel/Conglomerate

**Casing Perforations:** 

Meter Serial Number: 78092085223

Top Bottom

115 195

Meter Make: Meter Multiplier: BROKS

Number of Dials:

Meter Type:

10.0000 Diversion

Unit of Measure: Usage Multiplier:

**Meter Number:** 

Barrels 42 gal.

8632

Return Flow Percent: Reading Frequency:

Ouarterly

**Meter Readings (in Acre-Feet)** 

Read Date	Year M	tr Reading	Fla	g Rdr	Comment	Mtr Amount Online
01/01/2005	2005	0	A	jw		0
03/31/2005	2005	944409	A	jw		121.728
08/08/2005	2005	217766	R	jw	Meter Rollover	352.339
09/30/2005	2005	548362	A	RPT		426.116
12/31/2005	2005	119382	R	RPT	Meter Rollover	736.006
03/31/2006	2006	248548	A	RPT		166.486
**YTD Met	er Amounts:	Year		Amount		
		2005		1636.189		
		2006		166.486		

<sup>\*</sup>UTM location was derived from PLSS - see Help

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

8/23/22 11:17 AM

POINT OF DIVERSION SUMMARY



**APPENDIX C** 

Photographic Log

# **ENSOLUM**

### **Photographic Log**

Maverick Natural Resources, LLC EVGSAU 3202-385 Incident Number NAPP2207331663





Photograph 1 Date: 7/26/2022
Description: Photo of the release area during the initial assesment

Photograph 2 Date: 07/26/2022 Description: Photo of the release area during the initial assesment





Photograph 3 Date: 7/26/2022 Description: Photo of release extent taken during initial site assessment.

Photograph 4 Date: 7/25/2022

Description: Photo of release extent taken during initial site assessment.



### Photographic Log

Maverick Natural Resources, LLC **EVGSAU 3202-385** 

Incident Number NAPP2207331663





Photograph 5 Date: 8/11/2022
Description: Photo of the release area after remediation activities

Photograph 6 Date: 08/11/2022
Description: Photo of the release area after remediation activities





Photograph 7 Date:8/11/2022

Description: Photo of the release area after remediation activities

Photograph 8 Date: 8/11/2022
Description: Photo of the release area after remediation activities



APPENDIX D

Laboratory Analytical Reports



**ANALYTICAL REPORT** 

**America** 

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

Laboratory Job ID: 890-2350-1

Laboratory Sample Delivery Group: Lea County NM

**Environment Testing** 

Client Project/Site: EVGSAU 3202-385

Revision: 1

For:

eurofins 🔆

**Ensolum** 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 8/23/2022 3:22:20 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Received by OCD: 8/26/2022 11:58:26 AM

Visit us at:

.....LINKS

**Review your project** results through

EOL

**Have a Question?** 

www.eurofinsus.com/Env Released to Imaging: 8/31/2022/3:50:18 PM signature is intended to be the legally binding equivalent of a traditionally handwritten

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

Client: Ensolum
Project/Site: EVGSAU 3202-385
Laboratory Job ID: 890-2350-1
SDG: Lea County NM

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## **Definitions/Glossary**

Client: Ensolum Job ID: 890-2350-1 Project/Site: EVGSAU 3202-385

SDG: Lea County NM

### **Qualifiers**

### **GC VOA**

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

U Indicates the analyte was analyzed for but not detected.

### GC Semi VOA

Qualifier **Qualifier Description** 

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

\*1 LCS/LCSD RPD exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

### **Glossary**

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

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

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

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

Dil Fac **Dilution Factor** 

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

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

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

**RER** Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

**TNTC** Too Numerous To Count

### Case Narrative

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2350-1

SDG: Lea County NM

Job ID: 890-2350-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2350-1

### REVISION

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

Report revision history

#### Receipt

The samples were received on 5/26/2022 4:45 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 7.0°C

### **GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS05 (890-2350-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Dilutions were performed for the following samples: SS01 (890-2350-1) and SS04 (890-2350-4) due to matrix interference.

Method 8021B: Dilutions were performed for the following samples: SS02 (890-2350-2) and SS05 (890-2350-5) due to matrix interference.

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 880-26573 and analytical batch 880-26533 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.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-26573 and analytical batch 880-26533 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

### HPLC/IC

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

Job ID: 890-2350-1

Client: Ensolum Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Lab Sample ID: 890-2350-1 **Client Sample ID: SS01** Date Collected: 05/26/22 11:00 Matrix: Solid

Date Received: 05/26/22 16:45 Sample Depth: 0.2' bgs

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0200	U	0.0200	mg/Kg		06/03/22 09:28	06/03/22 18:19	1
Toluene	<0.0200	U	0.0200	mg/Kg		06/03/22 09:28	06/03/22 18:19	1
Ethylbenzene	<0.0200	U	0.0200	mg/Kg		06/03/22 09:28	06/03/22 18:19	1
m-Xylene & p-Xylene	<0.0399	U	0.0399	mg/Kg		06/03/22 09:28	06/03/22 18:19	1
o-Xylene	<0.0200	U	0.0200	mg/Kg		06/03/22 09:28	06/03/22 18:19	1
Xylenes, Total	<0.0399	U	0.0399	mg/Kg		06/03/22 09:28	06/03/22 18:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	105		70 - 130			06/03/22 09:28	06/03/22 18:19	1
1,4-Difluorobenzene (Surr)	102		70 - 130			06/03/22 09:28	06/03/22 18:19	1
Method: Total BTEX - Total I	BTEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.0399	U	0.0399	mg/Kg			06/03/22 10:04	
Method: 8015 NM - Diesel R	ange Organic	s (DRO) (0	SC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	4740		50.0	mg/Kg			06/01/22 09:20	
Method: 8015B NM - Diesel	Range Organ	ics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	61.3	*- *1	50.0	mg/Kg		05/31/22 11:16	06/01/22 04:47	
Diesel Range Organics (Over C10-C28)	3740		50.0	mg/Kg		05/31/22 11:16	06/01/22 04:47	
Oll Range Organics (Over C28-C36)	934		50.0	mg/Kg		05/31/22 11:16	06/01/22 04:47	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	111		70 - 130			05/31/22 11:16	06/01/22 04:47	
o-Terphenyl	113		70 - 130			05/31/22 11:16	06/01/22 04:47	
Method: 300.0 - Anions, Ion	Chromatogra	phy - Solu	ible					
		•		1114		Barra a sandal	A I	D11 E -
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa

**Client Sample ID: SS02** Lab Sample ID: 890-2350-2 **Matrix: Solid** 

Date Collected: 05/26/22 11:05 Date Received: 05/26/22 16:45

Sample Depth: 0.2' bgs

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402	mg/Kg		06/03/22 09:28	06/03/22 18:40	20
Toluene	<0.0402	U	0.0402	mg/Kg		06/03/22 09:28	06/03/22 18:40	20
Ethylbenzene	0.0651		0.0402	mg/Kg		06/03/22 09:28	06/03/22 18:40	20
m-Xylene & p-Xylene	<0.0803	U	0.0803	mg/Kg		06/03/22 09:28	06/03/22 18:40	20
o-Xylene	< 0.0402	U	0.0402	mg/Kg		06/03/22 09:28	06/03/22 18:40	20
Xylenes, Total	< 0.0803	U	0.0803	mg/Kg		06/03/22 09:28	06/03/22 18:40	20

Job ID: 890-2350-1

Client: Ensolum

Project/Site: EVGSAU 3202-385

Lab Sample ID: 890-2350-2

Client Sample ID: SS02 Date Collected: 05/26/22 11:05

**Matrix: Solid** 

SDG: Lea County NM

Date Received: 05/26/22 16:45 Sample Depth: 0.2' bgs

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77	70 - 130	06/03/22 09:28 0	06/03/22 18:40	20
1,4-Difluorobenzene (Surr)	109	70 - 130	06/03/22 09:28 0	06/03/22 18:40	20

**Method: Total BTEX - Total BTEX Calculation** 

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0803	Ū	0.0803	mg/Kg			06/03/22 10:04	1

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	11700	250	mg/Kg			06/01/22 09:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U *- *1	250	mg/Kg		05/31/22 11:16	06/01/22 04:26	5
Diesel Range Organics (Over C10-C28)	8990		250	mg/Kg		05/31/22 11:16	06/01/22 04:26	5
Oll Range Organics (Over C28-C36)	2740		250	mg/Kg		05/31/22 11:16	06/01/22 04:26	5
Survey made	0/ <b>D</b> agayamı	Ovalifian	l imita			Dranarad	Analyzad	Dil Faa

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91	70 - 130	05/31/22 11:16	06/01/22 04:26	5
o-Terphenyl	100	70 - 130	05/31/22 11:16	06/01/22 04:26	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4080		49.6	mg/Kg			06/01/22 20:37	10

**Client Sample ID: SS03** Lab Sample ID: 890-2350-3

Unit

Prepared

Date Collected: 05/26/22 11:07 Date Received: 05/26/22 16:45 **Matrix: Solid** 

Analyzed

Sample Depth: 0.2' bgs

Method: 8021B - Volatile Organ	nic Compoi	unds (GC)	
Analyte	Result	Qualifier	RI
Benzene	<0.00201	U	0.0020
Toluene	<0.00201	U	0.0020

Surrogato	%Pacayary	Qualifier	l imite		Propared	Analyzod	Dil Esc
Xylenes, Total	<0.00402	U	0.00402	mg/Kg	06/01/22 14:48	06/03/22 03:18	1
o-Xylene	<0.00201	U	0.00201	mg/Kg	06/01/22 14:48	06/03/22 03:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg	06/01/22 14:48	06/03/22 03:18	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg	06/01/22 14:48	06/03/22 03:18	1
Toluene	<0.00201	U	0.00201	mg/Kg	06/01/22 14:48	06/03/22 03:18	1
Benzene	<0.00201	U	0.00201	mg/Kg	06/01/22 14:48	06/03/22 03:18	1

Surrogate	%Recovery Qualif	ier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113	70 - 130	06/01/22 14:48	06/03/22 03:18	1
1,4-Difluorobenzene (Surr)	104	70 - 130	06/01/22 14:48	06/03/22 03:18	1
_					

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			06/03/22 10:04	1

Job ID: 890-2350-1

Client: Ensolum Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Lab Sample ID: 890-2350-3 **Client Sample ID: SS03** Date Collected: 05/26/22 11:07 **Matrix: Solid** 

Date Received: 05/26/22 16:45 Sample Depth: 0.2' bgs

Method: 8015 NM - Diesel Rang	ge Organic	s (DRO) (G0	C)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			06/01/22 09:20	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- *1	49.9	mg/Kg		05/31/22 11:16	06/01/22 03:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/31/22 11:16	06/01/22 03:43	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/31/22 11:16	06/01/22 03:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			05/31/22 11:16	06/01/22 03:43	1
o-Terphenyl	97		70 - 130			05/31/22 11:16	06/01/22 03:43	1

Method: 300.0 - Anions, Ion	Chromatography - Solub	le					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2430	25.1	mg/Kg			06/01/22 20:46	5

Client Sample ID: SS04 Lab Sample ID: 890-2350-4 **Matrix: Solid** 

Date Collected: 05/26/22 11:10 Date Received: 05/26/22 16:45

Sample Depth: 0.2' bgs

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0202	U	0.0202	mg/Kg		06/03/22 09:28	06/03/22 17:59	10
Toluene	<0.0202	U	0.0202	mg/Kg		06/03/22 09:28	06/03/22 17:59	10
Ethylbenzene	<0.0202	U	0.0202	mg/Kg		06/03/22 09:28	06/03/22 17:59	10
m-Xylene & p-Xylene	<0.0403	U	0.0403	mg/Kg		06/03/22 09:28	06/03/22 17:59	10
o-Xylene	<0.0202	U	0.0202	mg/Kg		06/03/22 09:28	06/03/22 17:59	10
Xylenes, Total	<0.0403	U	0.0403	mg/Kg		06/03/22 09:28	06/03/22 17:59	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	96		70 - 130			06/03/22 09:28	06/03/22 17:59	
1,4-Difluorobenzene (Surr)	96		70 - 130			06/03/22 09:28	06/03/22 17:59	10
Method: Total BTEX - Total	BTEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.0403	U	0.0403	mg/Kg			06/03/22 10:04	-

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1320	49.9	mg/Kg			06/01/22 09:20	1
Method: 8015B NM - Diese	I Range Organics (DRO) (C	GC)					

Method: 8015B NM - Diesel Ra	ange Organics (DRO) (C	SC)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9 U *- *1	49.9	mg/Kg		05/31/22 11:16	06/01/22 05:09	1
Diesel Range Organics (Over C10-C28)	1050	49.9	mg/Kg		05/31/22 11:16	06/01/22 05:09	1
Oll Range Organics (Over C28-C36)	274	49.9	mg/Kg		05/31/22 11:16	06/01/22 05:09	1

Job ID: 890-2350-1 SDG: Lea County NM

Project/Site: EVGSAU 3202-385 Client Sample ID: SS04

Client: Ensolum

Lab Sample ID: 890-2350-4

**Matrix: Solid** 

Date Collected: 05/26/22 11:10 Date Received: 05/26/22 16:45 Sample Depth: 0.2' bgs

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	05/31/22 11:16	06/01/22 05:09	1
o-Terphenyl	84		70 - 130	05/31/22 11:16	06/01/22 05:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride 5660 49.7 mg/Kg 06/01/22 21:14

Client Sample ID: SS05 Lab Sample ID: 890-2350-5 Date Collected: 05/26/22 11:15 Matrix: Solid

Date Received: 05/26/22 16:45 Sample Depth: 0.2' bgs

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene <0.0398 U 0.0398 mg/Kg 06/03/22 09:28 06/03/22 19:00 20 **Toluene** 0.0403 0.0398 mg/Kg 06/03/22 09:28 06/03/22 19:00 20 0.0994 mg/Kg 06/01/22 14:48 06/03/22 03:59 50 **Ethylbenzene** 9.73 06/01/22 14:48 06/03/22 03:59 50 m-Xylene & p-Xylene 13.3 0.199 mg/Kg 0.0994 mg/Kg 06/01/22 14:48 06/03/22 03:59 50 o-Xylene 7.60 06/01/22 14:48 06/03/22 03:59 50 **Xylenes, Total** 20.9 0.199 mg/Kg Surrogate %Recovery Qualifier Limits Dil Fac Prepared Analyzed

, ,	•		•	
4-Bromofluorobenzene (Surr)	155 S1+	70 - 130	06/03/22 09:28 06/03/22 19:00	20
1,4-Difluorobenzene (Surr)	111	70 - 130	06/03/22 09:28 06/03/22 19:00	20

**Method: Total BTEX - Total BTEX Calculation** Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac **Total BTEX** 30.7 0.199 mg/Kg 06/03/22 10:04

Method: 8015 NM - Diesel Range Organics (DRO) (GC)								
Analyte	Resul	It Qualifier R	-	Unit	D	Prepared	Analyzed	Dil Fac
Total T	PH 2030	0 25	)	mg/Kg			06/01/22 09:20	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Unit Analyte RL Prepared Analyzed Dil Fac 250 **Gasoline Range Organics** 1150 \*- \*1 05/31/22 11:16 06/01/22 04:04 mg/Kg (GRO)-C6-C10 **Diesel Range Organics (Over** 250 05/31/22 11:16 06/01/22 04:04 5 15400 mg/Kg C10-C28) **Oll Range Organics (Over** 3730 250 mg/Kg 05/31/22 11:16 06/01/22 04:04 5 C28-C36) %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 1-Chlorooctane 70 - 130 05/31/22 11:16 06/01/22 04:04 122 5 o-Terphenyl 90 70 - 130 05/31/22 11:16 06/01/22 04:04 5

Method: 300.0 - Anions, Ion Chromatography - Soluble							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.3	4.95	mg/Kg			06/01/22 21:23	1

## **Surrogate Summary**

Client: Ensolum Job ID: 890-2350-1
Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				urrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-15346-A-1-C MS	Matrix Spike	107	102	
880-15346-A-1-D MSD	Matrix Spike Duplicate	100	100	
890-2350-1	SS01	105	102	
890-2350-2	SS02	77	109	
890-2350-3	SS03	113	104	
890-2350-4	SS04	96	96	
890-2350-5	SS05	155 S1+	111	
890-2351-A-5-D MS	Matrix Spike	95	102	
890-2351-A-5-E MSD	Matrix Spike Duplicate	101	100	
LCS 880-26641/1-A	Lab Control Sample	100	102	
LCS 880-26788/1-A	Lab Control Sample	95	102	
LCSD 880-26641/2-A	Lab Control Sample Dup	102	98	
LCSD 880-26788/2-A	Lab Control Sample Dup	93	102	
MB 880-26459/5-A	Method Blank	97	99	
MB 880-26641/5-A	Method Blank	101	99	
MB 880-26788/5-A	Method Blank	94	91	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

			Percent Surroga	te Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2348-A-1-E MS	Matrix Spike	93	89	
890-2348-A-1-F MSD	Matrix Spike Duplicate	84	80	
890-2350-1	SS01	111	113	
890-2350-2	SS02	91	100	
890-2350-3	SS03	88	97	
890-2350-4	SS04	83	84	
890-2350-5	SS05	122	90	
LCS 880-26573/2-A	Lab Control Sample	98	100	
LCSD 880-26573/3-A	Lab Control Sample Dup	92	93	
MB 880-26573/1-A	Method Blank	95	108	

**Surrogate Legend** 

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

**Eurofins Carlsbad** 

8/23/2022 (Rev. 1)

Client: Ensolum

Job ID: 890-2350-1 Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-26459/5-A

**Matrix: Solid** 

**Analysis Batch: 26715** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

Prep Batch: 26459

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/27/22 14:42	06/02/22 13:30	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	05/27/22 14:42 06/02/22 13:3	) 1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/27/22 14:42 06/02/22 13:3	) 1

Lab Sample ID: MB 880-26641/5-A

Matrix: Solid

**Analysis Batch: 26715** 

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

Prep Batch: 26641

	IVID	IVID						
Analyte	Result (	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 01:07	1
Toluene	<0.00200 U	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 01:07	1
Ethylbenzene	<0.00200 U	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 01:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/01/22 10:48	06/03/22 01:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 01:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/01/22 10:48	06/03/22 01:07	1

MB MB

Surrogate	%Recovery Qua	ıalifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101	70 - 130	06/01/22 10:48	06/03/22 01:07	1
1,4-Difluorobenzene (Surr)	99	70 - 130	06/01/22 10:48	06/03/22 01:07	1

Lab Sample ID: LCS 880-26641/1-A

**Matrix: Solid** 

**Analysis Batch: 26715** 

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

**Client Sample ID: Lab Control Sample Dup** 

Prep Batch: 26641

Spike	LCS	LCS				%Rec	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
0.100	0.08593		mg/Kg	_	86	70 - 130	
0.100	0.09036		mg/Kg		90	70 - 130	
0.100	0.08043		mg/Kg		80	70 - 130	
0.200	0.1867		mg/Kg		93	70 - 130	
0.100	0.09391		mg/Kg		94	70 - 130	
	0.100 0.100 0.100 0.100 0.200	Added         Result           0.100         0.08593           0.100         0.09036           0.100         0.08043           0.200         0.1867	Added         Result         Qualifier           0.100         0.08593           0.100         0.09036           0.100         0.08043           0.200         0.1867	Added         Result         Qualifier         Unit           0.100         0.08593         mg/Kg           0.100         0.09036         mg/Kg           0.100         0.08043         mg/Kg           0.200         0.1867         mg/Kg	Added         Result         Qualifier         Unit         D           0.100         0.08593         mg/Kg           0.100         0.09036         mg/Kg           0.100         0.08043         mg/Kg           0.200         0.1867         mg/Kg	Added         Result         Qualifier         Unit         D         %Rec           0.100         0.08593         mg/Kg         86           0.100         0.09036         mg/Kg         90           0.100         0.08043         mg/Kg         80           0.200         0.1867         mg/Kg         93	Added         Result         Qualifier         Unit         D         %Rec         Limits           0.100         0.08593         mg/Kg         86         70 - 130           0.100         0.09036         mg/Kg         90         70 - 130           0.100         0.08043         mg/Kg         80         70 - 130           0.200         0.1867         mg/Kg         93         70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	100	70 - 130
1.4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: LCSD 880-26641/2-A

M

l	Matrix: Solid							Prep Ty	pe: Tot	al/NA
	Analysis Batch: 26715							Prep E	Batch: 2	26641
		Spike	LCSD	LCSD				%Rec		RPD
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Benzene	0.100	0.07928		mg/Kg		79	70 - 130	8	35

## **QC Sample Results**

Client: Ensolum Job ID: 890-2350-1 Project/Site: EVGSAU 3202-385 SDG: Lea County NM

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

Lab Sample ID: LCSD 880-26641/2-A

**Matrix: Solid** 

**Analysis Batch: 26715** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA Prep Batch: 26641

LCSD LCSD Spike %Rec **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Toluene 0.100 0.08888 mg/Kg 89 70 - 130 2 35 Ethylbenzene 0.100 0.08075 mg/Kg 81 70 - 130 0 35 m-Xylene & p-Xylene 0.200 0.1870 mg/Kg 94 70 - 130 0 35 o-Xylene 0.100 0.09435 mg/Kg 70 - 130 0 35 94

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-15346-A-1-C MS **Client Sample ID: Matrix Spike** 

**Matrix: Solid** 

**Analysis Batch: 26715** 

Prep Type: Total/NA

Prep Batch: 26641

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0998	0.08698		mg/Kg		87	70 - 130	
Toluene	<0.00199	U	0.0998	0.09229		mg/Kg		92	70 - 130	
Ethylbenzene	< 0.00199	U	0.0998	0.08338		mg/Kg		84	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1899		mg/Kg		95	70 - 130	
o-Xylene	<0.00199	U	0.0998	0.09459		mg/Kg		95	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	107	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 880-15346-A-1-D MSD

**Matrix: Solid** 

**Analysis Batch: 26715** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 26641

_	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.07537		mg/Kg		75	70 - 130	14	35
Toluene	< 0.00199	U	0.100	0.07843		mg/Kg		78	70 - 130	16	35
Ethylbenzene	<0.00199	U	0.100	0.07059		mg/Kg		70	70 - 130	17	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1591		mg/Kg		79	70 - 130	18	35
o-Xylene	<0.00199	U	0.100	0.08010		mg/Kg		80	70 - 130	17	35

MSD MSD

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

Lab Sample ID: MB 880-26788/5-A

**Matrix: Solid** 

**Analysis Batch: 26785** 

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

Prep Batch: 26788

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg	_	06/03/22 09:28	06/03/22 11:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/03/22 09:28	06/03/22 11:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/03/22 09:28	06/03/22 11:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/03/22 09:28	06/03/22 11:47	1

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# **QC Sample Results**

Client: Ensolum Job ID: 890-2350-1 Project/Site: EVGSAU 3202-385 SDG: Lea County NM

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

Lab Sample ID: MB 880-26788/5-A

**Matrix: Solid** 

**Analysis Batch: 26785** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** Prep Batch: 26788

Prep Batch: 26788

MB MB Analyte Result Qualifier Unit Prepared Analyzed Dil Fac o-Xylene <0.00200 U 0.00200 mg/Kg 06/03/22 09:28 06/03/22 11:47 Xylenes, Total <0.00400 U 0.00400 06/03/22 09:28 06/03/22 11:47 mg/Kg

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94	70 - 130	06/03/22 09:28	06/03/22 11:47	1
1,4-Difluorobenzene (Surr)	91	70 - 130	06/03/22 09:28	06/03/22 11:47	1

Lab Sample ID: LCS 880-26788/1-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 26785** 

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1033		mg/Kg		103	70 - 130	
Toluene	0.100	0.09719		mg/Kg		97	70 - 130	
Ethylbenzene	0.100	0.09928		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.200	0.1964		mg/Kg		98	70 - 130	
o-Xylene	0.100	0.09652		mg/Kg		97	70 - 130	

LCS LCS

Surrogate	%Recovery Qu	alifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-26788/2-A

**Matrix: Solid** 

**Analysis Batch: 26785** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA Prep Batch: 26788

Spike LCSD LCSD %Rec **RPD** Result Qualifier Analyte Added Unit D %Rec Limits RPD Limit Benzene 0.100 0.09572 96 70 - 130 mg/Kg 8 35 Toluene 0.100 0.09046 mg/Kg 90 70 - 130 7 35 Ethylbenzene 0.100 0.09188 mg/Kg 92 70 - 130 35 91 35 m-Xylene & p-Xylene 0.200 0.1819 mg/Kg 70 - 130 8 o-Xylene 0.100 0.09004 mg/Kg 90 70 - 130 35

LCSD LCSD

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	93	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-2351-A-5-D MS

**Matrix: Solid** 

Analysis Batch: 26785

Client Samp	le ID:	Matrix S	3pike
P	rep Ty	pe: Tota	al/NA

Prep Batch: 26788

Allalysis Datell. 20100									i ich Da	atcii. 20700
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.100	0.09471		mg/Kg		95	70 - 130	
Toluene	<0.00201	U	0.100	0.08831		mg/Kg		88	70 - 130	
Ethylbenzene	<0.00201	U	0.100	0.08780		mg/Kg		88	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1725		mg/Kg		86	70 - 130	
o-Xylene	<0.00201	U	0.100	0.08523		mg/Kg		85	70 - 130	

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2350-1

SDG: Lea County NM

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

Lab Sample ID: 890-2351-A-5-D MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 26785** 

**Prep Type: Total/NA** Prep Batch: 26788

MS MS %Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 95 70 - 130 1,4-Difluorobenzene (Surr) 102 70 - 130

Lab Sample ID: 890-2351-A-5-E MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

**Analysis Batch: 26785** 

**Prep Type: Total/NA** 

Prep Batch: 26788

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0998	0.09536		mg/Kg		96	70 - 130	1	35
Toluene	<0.00201	U	0.0998	0.08928		mg/Kg		89	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.0998	0.08779		mg/Kg		88	70 - 130	0	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1733		mg/Kg		87	70 - 130	0	35
o-Xylene	<0.00201	U	0.0998	0.08609		mg/Kg		86	70 - 130	1	35

MSD MSD

MD MD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-26573/1-A

**Matrix: Solid** 

**Analysis Batch: 26533** 

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

Prep Batch: 26573

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	Ū	50.0	mg/Kg		05/31/22 11:16	05/31/22 20:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/31/22 11:16	05/31/22 20:27	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/31/22 11:16	05/31/22 20:27	1
	MB	MB						

	III	W.D				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	05/31/22 11:16	05/31/22 20:27	1
o-Terphenyl	108		70 - 130	05/31/22 11:16	05/31/22 20:27	1

Lab Sample ID: LCS 880-26573/2-A

**Matrix: Solid** 

**Analysis Batch: 26533** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26573

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	 1000	908.4		mg/Kg		91	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	916.4		mg/Kg		92	70 - 130	
C40 C20)								

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	100		70 - 130

**Eurofins Carlsbad** 

C10-C28)

Released to Imaging: 8/31/2022 3:50:18 PM

Client: Ensolum Job ID: 890-2350-1 Project/Site: EVGSAU 3202-385

SDG: Lea County NM

Lab Sample ID: LCSD 880-26573/3-A

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

**Matrix: Solid Analysis Batch: 26533**  **Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA Prep Batch: 26573

Spike LCSD LCSD %Rec **RPD** Added Result Qualifier %Rec Limits RPD Limit Analyte Unit D 694.0 \*- \*1 Gasoline Range Organics 1000 mg/Kg 69 70 - 130 27 20 (GRO)-C6-C10 1000 Diesel Range Organics (Over 819.4 82 70 - 130 mg/Kg 20 11

C10-C28)

**Matrix: Solid** 

**Analysis Batch: 26533** 

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 92 70 - 130 o-Terphenyl 93

**Client Sample ID: Matrix Spike** 

Prep Type: Total/NA Prep Batch: 26573

%Rec

Sample Sample Spike MS MS Result Qualifier Added Result Qualifier D %Rec Limits Analyte Unit Gasoline Range Organics <50.0 U \*- \*1 1000 959.4 96 70 - 130 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 1000 910.9 mg/Kg 91 70 - 130 C10-C28)

MS MS Qualifier Surrogate %Recovery Limits 1-Chlorooctane 93 70 - 130 o-Terphenyl 89 70 - 130

Lab Sample ID: 890-2348-A-1-F MSD

Lab Sample ID: 890-2348-A-1-E MS

**Matrix: Solid** 

**Analysis Batch: 26533** 

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA Prep Batch: 26573

Spike MSD MSD %Rec RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <50.0 U \*- \*1 999 960.5 96 20 Gasoline Range Organics 70 - 130 0 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 829.3 83 70 - 130 20 mg/Kg

C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 84 70 - 130 80 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-26566/1-A **Client Sample ID: Method Blank Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 26664** 

MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac 5.00 Chloride <5.00 U mg/Kg 06/01/22 18:09

# **QC Sample Results**

Client: Ensolum Job ID: 890-2350-1 Project/Site: EVGSAU 3202-385

SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-26566/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 26664** LCS LCS Spike

%Rec Analyte Added Result Qualifier Unit Limits D %Rec Chloride 250 224.5 mg/Kg 90 90 - 110

Lab Sample ID: LCSD 880-26566/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble Analysis Batch: 26664** 

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 90 - 110 226.0 mg/Kg 90

Lab Sample ID: 890-2350-3 MS Client Sample ID: SS03 **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 26664** 

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Limits Unit %Rec Chloride 2430 1250 3737 104 mg/Kg

Lab Sample ID: 890-2350-3 MSD Client Sample ID: SS03

**Matrix: Solid Prep Type: Soluble Analysis Batch: 26664** 

Spike MSD MSD %Rec **RPD** Sample Sample

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 2430 1250 3765 mg/Kg 106 90 - 110

Released to Imaging: 8/31/2022 3:50:18 PM

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2350-1 SDG: Lea County NM

**GC VOA** 

Prep Batch: 26459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-26459/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 26641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-3	SS03	Total/NA	Solid	5035	
890-2350-5	SS05	Total/NA	Solid	5035	
MB 880-26641/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-26641/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-26641/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-15346-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-15346-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 26715** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-3	SS03	Total/NA	Solid	8021B	26641
890-2350-5	SS05	Total/NA	Solid	8021B	26641
MB 880-26459/5-A	Method Blank	Total/NA	Solid	8021B	26459
MB 880-26641/5-A	Method Blank	Total/NA	Solid	8021B	26641
LCS 880-26641/1-A	Lab Control Sample	Total/NA	Solid	8021B	26641
LCSD 880-26641/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	26641
880-15346-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	26641
880-15346-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	26641

**Analysis Batch: 26785** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-1	SS01	Total/NA	Solid	8021B	26788
890-2350-2	SS02	Total/NA	Solid	8021B	26788
890-2350-4	SS04	Total/NA	Solid	8021B	26788
890-2350-5	SS05	Total/NA	Solid	8021B	26788
MB 880-26788/5-A	Method Blank	Total/NA	Solid	8021B	26788
LCS 880-26788/1-A	Lab Control Sample	Total/NA	Solid	8021B	26788
LCSD 880-26788/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	26788
890-2351-A-5-D MS	Matrix Spike	Total/NA	Solid	8021B	26788
890-2351-A-5-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	26788

Prep Batch: 26788

. Top Datom 20100					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-1	SS01	Total/NA	Solid	5035	
890-2350-2	SS02	Total/NA	Solid	5035	
890-2350-4	SS04	Total/NA	Solid	5035	
890-2350-5	SS05	Total/NA	Solid	5035	
MB 880-26788/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-26788/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-26788/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2351-A-5-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2351-A-5-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 26799** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-1	SS01	Total/NA	Solid	Total BTEX	
890-2350-2	SS02	Total/NA	Solid	Total BTEX	

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2350-1 SDG: Lea County NM

# **GC VOA (Continued)**

# **Analysis Batch: 26799 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-3	SS03	Total/NA	Solid	Total BTEX	
890-2350-4	SS04	Total/NA	Solid	Total BTEX	
890-2350-5	SS05	Total/NA	Solid	Total BTEX	

# **GC Semi VOA**

# **Analysis Batch: 26533**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-1	SS01	Total/NA	Solid	8015B NM	26573
890-2350-2	SS02	Total/NA	Solid	8015B NM	26573
890-2350-3	SS03	Total/NA	Solid	8015B NM	26573
890-2350-4	SS04	Total/NA	Solid	8015B NM	26573
890-2350-5	SS05	Total/NA	Solid	8015B NM	26573
MB 880-26573/1-A	Method Blank	Total/NA	Solid	8015B NM	26573
LCS 880-26573/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26573
LCSD 880-26573/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26573
890-2348-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	26573
890-2348-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	26573

# Prep Batch: 26573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-1	SS01	Total/NA	Solid	8015NM Prep	
890-2350-2	SS02	Total/NA	Solid	8015NM Prep	
890-2350-3	SS03	Total/NA	Solid	8015NM Prep	
890-2350-4	SS04	Total/NA	Solid	8015NM Prep	
890-2350-5	SS05	Total/NA	Solid	8015NM Prep	
MB 880-26573/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26573/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26573/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2348-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2348-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### **Analysis Batch: 26631**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-1	SS01	Total/NA	Solid	8015 NM	
890-2350-2	SS02	Total/NA	Solid	8015 NM	
890-2350-3	SS03	Total/NA	Solid	8015 NM	
890-2350-4	SS04	Total/NA	Solid	8015 NM	
890-2350-5	SS05	Total/NA	Solid	8015 NM	

# HPLC/IC

# Leach Batch: 26566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-1	SS01	Soluble	Solid	DI Leach	
890-2350-2	SS02	Soluble	Solid	DI Leach	
890-2350-3	SS03	Soluble	Solid	DI Leach	
890-2350-4	SS04	Soluble	Solid	DI Leach	
890-2350-5	SS05	Soluble	Solid	DI Leach	
MB 880-26566/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-26566/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-26566/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2350-1

SDG: Lea County NM

# **HPLC/IC (Continued)**

# Leach Batch: 26566 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-3 MS	SS03	Soluble	Solid	DI Leach	
890-2350-3 MSD	SS03	Soluble	Solid	DI Leach	

# **Analysis Batch: 26664**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2350-1	SS01	Soluble	Solid	300.0	26566
890-2350-2	SS02	Soluble	Solid	300.0	26566
890-2350-3	SS03	Soluble	Solid	300.0	26566
890-2350-4	SS04	Soluble	Solid	300.0	26566
890-2350-5	SS05	Soluble	Solid	300.0	26566
MB 880-26566/1-A	Method Blank	Soluble	Solid	300.0	26566
LCS 880-26566/2-A	Lab Control Sample	Soluble	Solid	300.0	26566
LCSD 880-26566/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	26566
890-2350-3 MS	SS03	Soluble	Solid	300.0	26566
890-2350-3 MSD	SS03	Soluble	Solid	300.0	26566

Job ID: 890-2350-1

Client: Ensolum Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Client Sample ID: SS01

Date Collected: 05/26/22 11:00 Date Received: 05/26/22 16:45 Lab Sample ID: 890-2350-1

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	26788	06/03/22 09:28	MR	EET MID
Total/NA	Analysis	8021B		10	0 mL	1.0 mL	26785	06/03/22 18:19	MR	EET MID
Total/NA	Analysis	Total BTEX		1			26799	06/03/22 10:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			26631	06/01/22 09:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26573	05/31/22 11:16	DM	EET MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 04:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	26566	05/31/22 10:44	SMC	EET MID
Soluble	Analysis	300.0		10			26664	06/01/22 20:28	CH	EET MID

Client Sample ID: SS02 Lab Sample ID: 890-2350-2 Date Collected: 05/26/22 11:05 **Matrix: Solid** 

Date Received: 05/26/22 16:45

Batch Batch Dil Initial Final Batch Prepared Method Number **Prep Type** Type Run **Factor Amount** Amount or Analyzed **Analyst** Lab Total/NA 5035 26788 06/03/22 09:28 MR EET MID Prep 4.98 g 5 mL 8021B Total/NA 0 mL 26785 06/03/22 18:40 MR **EET MID** Analysis 20 1.0 mL Total/NA Total BTEX Analysis 26799 06/03/22 10:04 SM **EET MID** 1 Total/NA 8015 NM **EET MID** Analysis 1 26631 06/01/22 09:20 SM Total/NA Prep 8015NM Prep 10.02 g 10 mL 26573 05/31/22 11:16 DM **EET MID** Total/NA 8015B NM 26533 Analysis 5 06/01/22 04:26 SM **EET MID** Soluble 5.04 g 50 mL 26566 05/31/22 10:44 SMC Leach DI Leach **EET MID** Soluble 300.0 10 06/01/22 20:37 CH Analysis 26664 **EET MID** 

Client Sample ID: SS03 Lab Sample ID: 890-2350-3 Date Collected: 05/26/22 11:07 Matrix: Solid

Date Received: 05/26/22 16:45

	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	26641	06/01/22 14:48	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26715	06/03/22 03:18	MR	EET MID
Total/NA	Analysis	Total BTEX		1			26799	06/03/22 10:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			26631	06/01/22 09:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26573	05/31/22 11:16	DM	EET MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 03:43	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	26566	05/31/22 10:44	SMC	EET MID
Soluble	Analysis	300.0		5			26664	06/01/22 20:46	CH	EET MID

**Client Sample ID: SS04** Lab Sample ID: 890-2350-4 Date Collected: 05/26/22 11:10 Matrix: Solid

Date Received: 05/26/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	26788	06/03/22 09:28	MR	EET MID
Total/NA	Analysis	8021B		10	0 mL	1.0 mL	26785	06/03/22 17:59	MR	EET MID
Total/NA	Analysis	Total BTEX		1			26799	06/03/22 10:04	SM	EET MID

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2350-1

SDG: Lea County NM

**Client Sample ID: SS04** 

Date Collected: 05/26/22 11:10 Date Received: 05/26/22 16:45 Lab Sample ID: 890-2350-4

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			26631	06/01/22 09:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26573	05/31/22 11:16	DM	EET MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 05:09	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	26566	05/31/22 10:44	SMC	EET MID
Soluble	Analysis	300.0		10			26664	06/01/22 21:14	CH	EET MID

**Client Sample ID: SS05** Lab Sample ID: 890-2350-5

Date Collected: 05/26/22 11:15 Date Received: 05/26/22 16:45 **Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	26641	06/01/22 14:48	MR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	26715	06/03/22 03:59	MR	EET MID
Total/NA	Prep	5035			5.02 g	5 mL	26788	06/03/22 09:28	MR	EET MID
Total/NA	Analysis	8021B		20	0 mL	1.0 mL	26785	06/03/22 19:00	MR	EET MID
Total/NA	Analysis	Total BTEX		1			26799	06/03/22 10:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			26631	06/01/22 09:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	26573	05/31/22 11:16	DM	EET MID
Total/NA	Analysis	8015B NM		5			26533	06/01/22 04:04	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	26566	05/31/22 10:44	SMC	EET MID
Soluble	Analysis	300.0		1			26664	06/01/22 21:23	CH	EET MID

#### **Laboratory References:**

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

# **Accreditation/Certification Summary**

Client: Ensolum Job ID: 890-2350-1
Project/Site: EVGSAU 3202-385 SDG: Lea County NM

# **Laboratory: Eurofins Midland**

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

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

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# **Method Summary**

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2350-1

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
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
015NM Prep	Microextraction	SW846	EET MID
Ol 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: EVGSAU 3202-385

Job ID: 890-2350-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2350-1	SS01	Solid	05/26/22 11:00	05/26/22 16:45	0.2' bgs
890-2350-2	SS02	Solid	05/26/22 11:05	05/26/22 16:45	0.2' bgs
890-2350-3	SS03	Solid	05/26/22 11:07	05/26/22 16:45	0.2' bgs
890-2350-4	SS04	Solid	05/26/22 11:10	05/26/22 16:45	0.2' bgs
890-2350-5	SS05	Solid	05/26/22 11:15	05/26/22 16:45	0.2' bgs

# 💸 eurofii

Project Manager:

City, State ZIP:

# Chain of Custody

			2160166110	Ç		M
		קצ	-		1740	
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	2)	Neceived by: (Signature)	Relinquished by: (Signature)
	itions ntrol 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.	ins Xenco, its affiliates and sues incurred by the client if sues incurred by the client if sue irofins Xenco, but not analyzarofins Xenco, but not analyzarofins	er from client company to Euro nsibility for any losses or expen for each sample submitted to E	nt of samples constitutes a valid purchase ordust of samples and shall not assume any respoe applied to each project and a charge of \$5	:: Signature of this document and relinquishmen Ace. Eurofins Xenco will be liable only for the co ofins Xenco. A minimum charge of \$85.00 will b
Sn U V Zn 170 /7471	lo Ni K Se Ag SiO <sub>2</sub> Na Sr Tl Sn l l U Hg: 1631/245.1/7470	A 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	As Ba Be B Cd o	M Texas 11 Al Sb PLP 6010 : 8RCRA St	20: 8RCRA 13PPM TCLP/SPLP	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
			\( \frac{\gamma}{\sigma} \)	4	3	5505
						NOSS
			XXX		101	5503
			ベベス		GAN-	SS02
			× λ ×	0.5° (7-1	S 5/26/12 1100	いくつ
Sample Comments			TPH BTE Chi	Depth Grab/ # of Cont	Matrix Date Time Sampled	Sample Identification
NaOH+Ascorbic Acid: SAPC	NaO		5X	1. 0	Corrected Temperature:	Total Containers:
Zn Acetate+NaOH: Zn	Zn A		(	(O)	N/A Temperature Reading:	Sample Custody Seals: Yes No N/A
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	Na <sub>2</sub>	890-2350 Chall of Custory	200		N/A Correction Factor:	Ye
NaHSO 4: NABIS	Nah		2	2MC 283	o Thermometer ID:	tact:
H <sub>3</sub> PO <sub>4</sub> : HP	Н₃Р			No seter	nk: (Yes) No Wet Ice:	SAMPLE RECEIPT Temp Blank:
H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na	H <sub>2</sub> S(		)2_	<u></u>		NIC
HCL: HC HNO 3: HN	НСГ			TAT starts the day received by		~
Cool: Cool MeOH: Me	Coo		)		ATU IN M Due Date:	Project Location: [QU CUNTY IN
None: NO DI Water: H <sub>2</sub> O	Non			Rush Code	のようユン MBoutine	per:
Preservative Codes		ANALYSIS REQUEST		Turn Around	CVG5AU3202-385 Turn	roject Name: CVGSAU
Other:	Deliverables: EDD	@ensolun.com Delive	N	Kjenning		hone: \$176832503
ST	Reporting: Level III   Level III   PST/U:	Repor		City, State ZIP:	V.V. \$8270	Tity, State ZIP: Call bood, UM
		State		Address:	22 North Parks Hull	31-
elds  RRC Superfund	am: UST/PST PRP Brownfields	Program:		Company Name:	1	
ents	Work Order Comments			Bill to: (if different)	calci Jennings	roject Manager: Kalci
Page of	www.xenco.com f	VM (575) 988-3199	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	Hobbs, NM (5		
		X (806) 794-1296	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	EL Paso, TX (9	100	Xenco
	Work Order No:	,, TX (210) 509-3334	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Midland, TX (43	<b>Environment Testing</b>	
		X (714) 902-0300	Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300	Houston, TX		eurotins

Revised Date: 08/25/2020 Fev. 2020.2

# **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-2350-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 2350 List Number: 1 Creator: Clifton, Cloe

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

True

N/A

True

N/A

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Sample bottles are completely filled.

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

Containers requiring zero headspace have no headspace or bubble is

Sample Preservation Verified.

MS/MSDs

<6mm (1/4").

# **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-2350-1 SDG Number: Lea County NM

Login Number: 2350 **List Source: Eurofins Midland** List Creation: 05/31/22 08:34 AM List Number: 2

Creator: Rodriguez, Leticia

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



# **Environment Testing America**

# **ANALYTICAL REPORT**

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

Laboratory Job ID: 890-2351-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: EVGSAU 3202-385

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 6/3/2022 1:28:16 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: EVGSAU 3202-385
Laboratory Job ID: 890-2351-1
SDG: Lea County NM

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# **Definitions/Glossary**

Job ID: 890-2351-1 Client: Ensolum Project/Site: EVGSAU 3202-385 SDG: Lea County NM

**Qualifiers** 

**GC VOA** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier **Qualifier Description** 

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

\*1 LCS/LCSD RPD exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**Glossary** 

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

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor** 

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: EVGSAU 3202-385

Job ID: 890-2351-1

SDG: Lea County NM

Job ID: 890-2351-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2351-1

#### Receipt

The samples were received on 5/26/2022 4:45 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 7.0°C

#### **GC VOA**

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

#### GC Semi VOA

Method 8015MOD NM: The laboratory control sample (LCS) associated with preparation batch 880-26573 and analytical batch 880-26533 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.

Method 8015MOD NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-26573 and analytical batch 880-26533 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

#### HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-2351-1

# **Client Sample Results**

Client: Ensolum Job ID: 890-2351-1 Project/Site: EVGSAU 3202-385 SDG: Lea County NM

**Client Sample ID: SS06** 

Date Collected: 05/26/22 12:10 Date Received: 05/26/22 16:45

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 07:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 07:52	1
Ethylbenzene	0.00275		0.00200	mg/Kg		06/01/22 10:48	06/03/22 07:52	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		06/01/22 10:48	06/03/22 07:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 07:52	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		06/01/22 10:48	06/03/22 07:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			06/01/22 10:48	06/03/22 07:52	1
1,4-Difluorobenzene (Surr)	101		70 - 130			06/01/22 10:48	06/03/22 07:52	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			06/03/22 10:04	1
Method: 8015 NM - Diesel Range			RI	Unit	D	Prenared	Analyzed	Dil Fa
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
		Qualifier	<b>RL</b> 50.0	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 06/01/22 09:20	
Analyte		Qualifier U			<u>D</u>	Prepared		
Analyte Total TPH	Result  <50.0 ge Organics (Diameter)	Qualifier U			<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0  ge Organics (Dige Result	Qualifier U RO) (GC)	50.0	mg/Kg			06/01/22 09:20	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10		Qualifier U  RO) (GC) Qualifier U *- *1	50.0 RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 05/31/22 11:16	06/01/22 09:20  Analyzed  06/01/22 01:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U *- *1	50.0	mg/Kg		Prepared	06/01/22 09:20  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10		Qualifier U  RO) (GC) Qualifier U *- *1	50.0 RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 05/31/22 11:16	06/01/22 09:20  Analyzed  06/01/22 01:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *- *1 U	50.0  RL  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/22 11:16 05/31/22 11:16	06/01/22 09:20  Analyzed  06/01/22 01:11  06/01/22 01:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *- *1 U	50.0  RL 50.0  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/22 11:16 05/31/22 11:16 05/31/22 11:16	06/01/22 09:20  Analyzed 06/01/22 01:11 06/01/22 01:11	Dil Face
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *- *1 U	50.0  RL 50.0  50.0  50.0  Limits	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/22 11:16 05/31/22 11:16 05/31/22 11:16 Prepared	Analyzed 06/01/22 09:20  Analyzed 06/01/22 01:11 06/01/22 01:11  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *- *1 U  Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared  05/31/22 11:16  05/31/22 11:16  05/31/22 11:16  Prepared  05/31/22 11:16	06/01/22 09:20  Analyzed 06/01/22 01:11  06/01/22 01:11  Analyzed 06/01/22 01:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U  RO) (GC) Qualifier U *- *1 U  Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared  05/31/22 11:16  05/31/22 11:16  05/31/22 11:16  Prepared  05/31/22 11:16	06/01/22 09:20  Analyzed 06/01/22 01:11  06/01/22 01:11  Analyzed 06/01/22 01:11	Dil Fac

**Client Sample ID: SS07** 

Date Collected: 05/26/22 12:15 Date Received: 05/26/22 16:45

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		06/01/22 10:48	06/03/22 08:12	1
Toluene	<0.00201	U	0.00201	mg/Kg		06/01/22 10:48	06/03/22 08:12	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/01/22 10:48	06/03/22 08:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		06/01/22 10:48	06/03/22 08:12	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		06/01/22 10:48	06/03/22 08:12	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/01/22 10:48	06/03/22 08:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			06/01/22 10:48	06/03/22 08:12	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2351-2

Matrix: Solid

Client: Ensolum

Job ID: 890-2351-1

Project/Site: FVCSAU 2303-395

Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Client Sample ID: SS07 Lab Sample ID: 890-2351-2

Date Collected: 05/26/22 12:15

Date Received: 05/26/22 16:45

Matrix: Solid

Sample Depth: 0.5

Method: 8021B - Volatile Organic	: Compounds (	(GC) (Conti	nued)					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130			06/01/22 10:48	06/03/22 08:12	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			06/03/22 10:04	1
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	- <del>Kesuk</del> - <49.9		49.9	<u></u>	_ =	- repared	06/01/22 09:20	1
Method: 8015B NM - Diesel Rang Analyte	,	RO) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *- *1	49.9	mg/Kg		05/31/22 11:16	06/01/22 01:33	1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/31/22 11:16	06/01/22 01:33	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/31/22 11:16	06/01/22 01:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

 Analyte
 Result Chloride
 Qualifier
 RL graph
 Unit mg/Kg
 D mg/Kg
 Prepared Prepared 06/01/22 22:00
 Analyzed Dil Fac 06/01/22 22:00
 D mg/Kg
 Lab Sample ID: 890-2351-3

70 - 130

70 - 130

101

107

Date Collected: 05/26/22 12:50 Date Received: 05/26/22 16:45

Method: 300.0 - Anions, Ion Chromatography - Soluble

Sample Depth: 0.5

1-Chlorooctane

o-Terphenyl

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 08:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 08:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 08:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		06/01/22 10:48	06/03/22 08:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/01/22 10:48	06/03/22 08:33	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		06/01/22 10:48	06/03/22 08:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			06/01/22 10:48	06/03/22 08:33	1
1,4-Difluorobenzene (Surr)	101		70 - 130			06/01/22 10:48	06/03/22 08:33	1
Method: Total BTEX - Total B	ΓEX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			06/03/22 10:04	1
Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			06/01/22 09:20	

**Eurofins Carlsbad** 

2

4

7

9

12

13

05/31/22 11:16

05/31/22 11:16

06/01/22 01:33

06/01/22 01:33

**Matrix: Solid** 

Job ID: 890-2351-1

Client: Ensolum Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Lab Sample ID: 890-2351-3 **Client Sample ID: SS08** 

Date Collected: 05/26/22 12:50 Matrix: Solid Date Received: 05/26/22 16:45

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *- *1	49.9	mg/Kg		05/31/22 11:16	06/01/22 02:16	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		05/31/22 11:16	06/01/22 02:16	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/31/22 11:16	06/01/22 02:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			05/31/22 11:16	06/01/22 02:16	1
o-Terphenyl	109		70 - 130			05/31/22 11:16	06/01/22 02:16	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
				11-14	D	Duamanad	Amalumad	Dil Fac
Analyte	Result	Qualifier	RL	Unit	U	Prepared	Analyzed	DII Fac

Lab Sample ID: 890-2351-4 **Client Sample ID: SS09** 

Date Collected: 05/26/22 12:55 Matrix: Solid

Date Received: 05/26/22 16:45

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		06/01/22 10:48	06/03/22 08:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		06/01/22 10:48	06/03/22 08:53	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		06/01/22 10:48	06/03/22 08:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/01/22 10:48	06/03/22 08:53	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		06/01/22 10:48	06/03/22 08:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/01/22 10:48	06/03/22 08:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130			06/01/22 10:48	06/03/22 08:53	1
1,4-Difluorobenzene (Surr)	101		70 - 130			06/01/22 10:48	06/03/22 08:53	1
Method: Total BTEX - Total BTE	K Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/03/22 10:04	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
_		Qualifier	RL 50.0	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 06/01/22 09:20	Dil Fac
Analyte Total TPH	Result < 50.0	Qualifier U			<u>D</u>	Prepared		
Analyte	Result <50.0	Qualifier U			<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result <50.0  Ge Organics (Dige Result	Qualifier U RO) (GC)	50.0	mg/Kg			06/01/22 09:20	
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <50.0  Ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier	50.0	mg/Kg		Prepared	06/01/22 09:20  Analyzed	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  Ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U *- *1	50.0	mg/Kg		Prepared	06/01/22 09:20  Analyzed	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *- *1	50.0  RL  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/22 11:16 05/31/22 11:16	06/01/22 09:20  Analyzed  06/01/22 02:38  06/01/22 02:38	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  Ge Organics (Dige Result <50.0)	Qualifier U  RO) (GC) Qualifier U *- *1	50.0 RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 05/31/22 11:16	06/01/22 09:20  Analyzed  06/01/22 02:38	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *- *1 U	50.0  RL  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/22 11:16 05/31/22 11:16	06/01/22 09:20  Analyzed  06/01/22 02:38  06/01/22 02:38	1 Dil Fac 1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *- *1 U	50.0  RL  50.0  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/22 11:16 05/31/22 11:16 05/31/22 11:16	06/01/22 09:20  Analyzed 06/01/22 02:38 06/01/22 02:38	1 Dil Fac 1 1

Matrix: Solid

Client: Ensolum Job ID: 890-2351-1 Project/Site: EVGSAU 3202-385 SDG: Lea County NM

**Client Sample ID: SS09** Lab Sample ID: 890-2351-4

Date Collected: 05/26/22 12:55 Matrix: Solid Date Received: 05/26/22 16:45

Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.3		4.99	mg/Kg			06/01/22 22:18	1

**Client Sample ID: SS10** Lab Sample ID: 890-2351-5

Date Collected: 05/26/22 13:00 Date Received: 05/26/22 16:45

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201	mg/Kg		06/03/22 09:28 06/03/22 12:09		
Toluene	<0.00201	U	0.00201	mg/Kg		06/03/22 09:28	06/03/22 12:09	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/03/22 09:28	06/03/22 12:09	
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		06/03/22 09:28	06/03/22 12:09	
o-Xylene	<0.00201	U	0.00201	mg/Kg		06/03/22 09:28	06/03/22 12:09	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/03/22 09:28	06/03/22 12:09	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		70 - 130			06/03/22 09:28	06/03/22 12:09	
1,4-Difluorobenzene (Surr)	97		70 - 130			06/03/22 09:28	06/03/22 12:09	
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402	mg/Kg			06/03/22 10:04	•
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			06/01/22 09:20	•
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *- *1	50.0	mg/Kg		05/31/22 11:16	06/01/22 03:00	•
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/31/22 11:16	06/01/22 03:00	,
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/31/22 11:16	06/01/22 03:00	
	a	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Surrogate	%Recovery	4						
			70 - 130			05/31/22 11:16	06/01/22 03:00	
Surrogate 1-Chlorooctane o-Terphenyl			70 - 130 70 - 130			05/31/22 11:16 05/31/22 11:16	06/01/22 03:00 06/01/22 03:00	
1-Chlorooctane	88 91							1
1-Chlorooctane o-Terphenyl	88 91 omatography -			Unit	D			Dil Fac

Matrix: Solid

Lab Sample ID: 890-2351-6

# **Client Sample Results**

Job ID: 890-2351-1 Client: Ensolum SDG: Lea County NM

Project/Site: EVGSAU 3202-385

**Client Sample ID: SS11** Date Collected: 05/26/22 13:05 Date Received: 05/26/22 16:45

Sample Depth: 0.5

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		06/03/22 09:28	06/03/22 12:29	1
Toluene	< 0.00199	U	0.00199	mg/Kg		06/03/22 09:28	06/03/22 12:29	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		06/03/22 09:28	06/03/22 12:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/03/22 09:28	06/03/22 12:29	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		06/03/22 09:28	06/03/22 12:29	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/03/22 09:28	06/03/22 12:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			06/03/22 09:28	06/03/22 12:29	1
1,4-Difluorobenzene (Surr)	99		70 - 130			06/03/22 09:28	06/03/22 12:29	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/03/22 10:04	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			06/01/22 09:20	1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *- *1	50.0	mg/Kg		05/31/22 11:16	06/01/22 03:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/31/22 11:16	06/01/22 03:22	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/31/22 11:16	06/01/22 03:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			05/31/22 11:16	06/01/22 03:22	1
o-Terphenyl	106		70 - 130			05/31/22 11:16	06/01/22 03:22	1
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

5.03

66.9

mg/Kg

**Eurofins Carlsbad** 

06/01/22 22:37

# **Surrogate Summary**

Client: Ensolum Job ID: 890-2351-1 Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-15346-A-1-C MS	Matrix Spike	107	102	
880-15346-A-1-D MSD	Matrix Spike Duplicate	100	100	
390-2351-1	SS06	110	101	
390-2351-2	SS07	105	98	
390-2351-3	SS08	107	101	
390-2351-4	SS09	114	101	
390-2351-5	SS10	100	97	
390-2351-5 MS	SS10	95	102	
890-2351-5 MSD	SS10	101	100	
390-2351-6	SS11	100	99	
_CS 880-26641/1-A	Lab Control Sample	100	102	
_CS 880-26788/1-A	Lab Control Sample	95	102	
LCSD 880-26641/2-A	Lab Control Sample Dup	102	98	
_CSD 880-26788/2-A	Lab Control Sample Dup	93	102	
MB 880-26459/5-A	Method Blank	97	99	
MB 880-26641/5-A	Method Blank	101	99	
	Method Blank	94	91	

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2348-A-1-E MS	Matrix Spike	93	89	
890-2348-A-1-F MSD	Matrix Spike Duplicate	84	80	
890-2351-1	SS06	94	99	
890-2351-2	SS07	101	107	
890-2351-3	SS08	101	109	
890-2351-4	SS09	88	93	
890-2351-5	SS10	88	91	
890-2351-6	SS11	99	106	
LCS 880-26573/2-A	Lab Control Sample	98	100	
LCSD 880-26573/3-A	Lab Control Sample Dup	92	93	
MB 880-26573/1-A	Method Blank	95	108	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2351-1 Project/Site: EVGSAU 3202-385 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-26459/5-A

**Matrix: Solid** 

Analysis Batch: 26715

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26459

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/27/22 14:42	06/02/22 13:30	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/27/22 14:42	06/02/22 13:30	1

MB MB

MR MR

Result Qualifier

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed
4-Bromofluorobenzene (Surr)	97		70 - 130	05/27/22 14:42	06/02/22 13:30
1,4-Difluorobenzene (Surr)	99		70 - 130	05/27/22 14:42	06/02/22 13:30

Lab Sample ID: MB 880-26641/5-A

**Matrix: Solid** 

Analyte

Analysis Batch: 26715

Client Sample ID: Method Blank

Analyzed

Prepared

Prep Type: Total/NA

Prep Batch: 26641

Dil Fac

Dil Fac

Benzene <0.00200 U 0.00200 mg/Kg 06/01/22 10:48 06/03/22 01:07 Toluene <0.00200 U 0.00200 mg/Kg 06/01/22 10:48 06/03/22 01:07 Ethylbenzene <0.00200 U 0.00200 mg/Kg 06/01/22 10:48 06/03/22 01:07 0.00400 06/01/22 10:48 06/03/22 01:07 m-Xylene & p-Xylene <0.00400 U mg/Kg <0.00200 U 0.00200 06/01/22 10:48 06/03/22 01:07 o-Xylene mg/Kg Xylenes, Total <0.00400 U 0.00400 mg/Kg 06/01/22 10:48 06/03/22 01:07

RL

Unit

MB MB

Surrogate	%Recovery	Qualifier	Limits	Pre	pared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	06/01/	/22 10:48	06/03/22 01:07	1
1,4-Difluorobenzene (Surr)	99		70 - 130	06/01/	/22 10:48	06/03/22 01:07	1

Lab Sample ID: LCS 880-26641/1-A

**Matrix: Solid** 

**Analysis Batch: 26715** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 26641

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08593		mg/Kg		86	70 - 130	
Toluene	0.100	0.09036		mg/Kg		90	70 - 130	
Ethylbenzene	0.100	0.08043		mg/Kg		80	70 - 130	
m-Xylene & p-Xylene	0.200	0.1867		mg/Kg		93	70 - 130	
o-Xylene	0.100	0.09391		mg/Kg		94	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	100	70 - 130
1.4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: LCSD 880-26641/2-A

**Matrix: Solid** 

**Analysis Batch: 26715** 

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

Prep Batch: 26641

	<b>Spike</b>	LCSD LCSD				%Rec		RPD	
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.07928	mg/Kg		79	70 - 130	8	35	

35

35

# QC Sample Results

Spike

Added

0.100

0.100

0.200

0.100

Client: Ensolum Job ID: 890-2351-1 Project/Site: EVGSAU 3202-385 SDG: Lea County NM

LCSD LCSD

0.08888

0.08075

0.1870

0.09435

Result Qualifier

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

Lab Sample ID: LCSD 880-26641/2-A

**Matrix: Solid** 

Analyte

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

**Analysis Batch: 26715** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 26641

0

%Rec **RPD** Unit %Rec Limits **RPD** Limit 89 70 - 130 35 mg/Kg 2 mg/Kg 81 70 - 130 0 35

94

94

70 - 130

70 - 130

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-15346-A-1-C MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 26715** 

Prep Type: Total/NA

Prep Batch: 26641 MS MS %Rec Spike

mg/Kg

mg/Kg

Sample Sample Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Benzene <0.00199 0.0998 0.08698 87 70 - 130 mg/Kg Toluene <0.00199 U 0.0998 0.09229 92 70 - 130 mg/Kg Ethylbenzene <0.00199 U 0.0998 0.08338 70 - 130 mg/Kg 84 0.200 m-Xylene & p-Xylene <0.00398 U 0.1899 95 70 - 130 mg/Kg o-Xylene <0.00199 U 0.0998 0.09459 mg/Kg 95 70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	107	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 880-15346-A-1-D MSD

**Matrix: Solid** 

**Analysis Batch: 26715** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 26641

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00199	U	0.100	0.07537		mg/Kg		75	70 - 130	14	35	
Toluene	<0.00199	U	0.100	0.07843		mg/Kg		78	70 - 130	16	35	
Ethylbenzene	<0.00199	U	0.100	0.07059		mg/Kg		70	70 - 130	17	35	
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1591		mg/Kg		79	70 - 130	18	35	
o-Xylene	<0.00199	U	0.100	0.08010		mg/Kg		80	70 - 130	17	35	

MSD MSD

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

Lab Sample ID: MB 880-26788/5-A

**Matrix: Solid** 

Analysis Batch: 26785

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26788

мв мв

А	nalyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
В	enzene	<0.00200	U	0.00200	mg/Kg	_	06/03/22 09:28	06/03/22 11:47	1
T	oluene	<0.00200	U	0.00200	mg/Kg		06/03/22 09:28	06/03/22 11:47	1
E	thylbenzene	<0.00200	U	0.00200	mg/Kg		06/03/22 09:28	06/03/22 11:47	1
m	n-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/03/22 09:28	06/03/22 11:47	1

# **QC Sample Results**

Client: Ensolum Job ID: 890-2351-1 SDG: Lea County NM Project/Site: EVGSAU 3202-385

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

Lab Sample ID: MB 880-26788/5-A

**Matrix: Solid** 

Analysis Batch: 26785

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 26788

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/03/22 09:28	06/03/22 11:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/03/22 09:28	06/03/22 11:47	1

мв мв

мв мв

Surrogate	%Recovery	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94	70 - 130	06/03/22 09:28	06/03/22 11:47	1
1,4-Difluorobenzene (Surr)	91	70 - 130	06/03/22 09:28	06/03/22 11:47	1

Lab Sample ID: LCS 880-26788/1-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

**Analysis Batch: 26785** 

Prep Type: Total/NA

Prep Batch: 26788

	<b>Spike</b>	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1033		mg/Kg		103	70 - 130	
Toluene	0.100	0.09719		mg/Kg		97	70 - 130	
Ethylbenzene	0.100	0.09928		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.200	0.1964		mg/Kg		98	70 - 130	
o-Xylene	0.100	0.09652		mg/Kg		97	70 - 130	

LCS LCS

Surrogate	%Recovery Quali	ifier Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: LCSD 880-26788/2-A

Matrix: Solid

Analysis Batch: 26785

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

Prep Batch: 26788

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09572		mg/Kg		96	70 - 130	8	35	
Toluene	0.100	0.09046		mg/Kg		90	70 - 130	7	35	
Ethylbenzene	0.100	0.09188		mg/Kg		92	70 - 130	8	35	
m-Xylene & p-Xylene	0.200	0.1819		mg/Kg		91	70 - 130	8	35	
o-Xylene	0.100	0.09004		mg/Kg		90	70 - 130	7	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	93	70 - 130
1.4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-2351-5 MS

**Matrix: Solid** 

Analysis Batch: 26785

Client Sample ID: SS10

Prep Type: Total/NA

Prep Batch: 26788

•	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.100	0.09471		mg/Kg		95	70 - 130	
Toluene	<0.00201	U	0.100	0.08831		mg/Kg		88	70 - 130	
Ethylbenzene	<0.00201	U	0.100	0.08780		mg/Kg		88	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1725		mg/Kg		86	70 - 130	
o-Xylene	< 0.00201	U	0.100	0.08523		mg/Kg		85	70 - 130	

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Released to Imaging: 8/31/2022 3:50:18 PM

Job ID: 890-2351-1 Client: Ensolum Project/Site: EVGSAU 3202-385 SDG: Lea County NM

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

Lab Sample ID: 890-2351-5 MS

**Matrix: Solid** 

**Analysis Batch: 26785** 

**Client Sample ID: SS10** Prep Type: Total/NA

Prep Batch: 26788

MS MS %Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 95 70 - 130 1,4-Difluorobenzene (Surr) 102 70 - 130

Lab Sample ID: 890-2351-5 MSD

**Matrix: Solid** 

Analysis Batch: 26785

**Client Sample ID: SS10** Prep Type: Total/NA Prep Batch: 26788

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0998	0.09536		mg/Kg		96	70 - 130	1	35
Toluene	<0.00201	U	0.0998	0.08928		mg/Kg		89	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.0998	0.08779		mg/Kg		88	70 - 130	0	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1733		mg/Kg		87	70 - 130	0	35
o-Xylene	<0.00201	U	0.0998	0.08609		mg/Kg		86	70 - 130	1	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	101	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

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

Lab Sample ID: MB 880-26573/1-A

**Matrix: Solid** 

Analysis Batch: 26533

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

Prep Batch: 26573

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/31/22 11:16	05/31/22 20:27	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		05/31/22 11:16	05/31/22 20:27	1
C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/31/22 11:16	05/31/22 20:27	1

MB MB

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	05/31/22 11:16	05/31/22 20:27	1
o-Terphenyl	108		70 - 130	05/31/22 11:16	05/31/22 20:27	1

Lab Sample ID: LCS 880-26573/2-A

**Matrix: Solid** 

**Analysis Batch: 26533** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	908.4		mg/Kg		91	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	916.4		mg/Kg		92	70 - 130	

C10-C28)

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	100		70 - 130

**Eurofins Carlsbad** 

Prep Batch: 26573

Lab Sample ID: LCSD 880-26573/3-A

Job ID: 890-2351-1

Client: Ensolum Project/Site: EVGSAU 3202-385 SDG: Lea County NM

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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 26573

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	694.0	*- *1	mg/Kg		69	70 - 130	27	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	819.4		mg/Kg		82	70 - 130	11	20

C10-C28)

**Matrix: Solid** 

Analysis Batch: 26533

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	93		70 - 130

Client Sample ID: Matrix Spike

Matrix: Solid

Lab Sample ID: 890-2348-A-1-E MS

**Analysis Batch: 26533** 

Prep Type: Total/NA

Prep Batch: 26573

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *- *1	1000	959.4		mg/Kg		96	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	910.9		mg/Kg		91	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 890-2348-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

**Analysis Batch: 26533** 

Prep Type: Total/NA

Prep Batch: 26573

١		Sample	Sample	Spike	MSD	MSD				%Rec		RPD
۱	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Gasoline Range Organics (GRO)-C6-C10	<50.0	U *- *1	999	960.5		mg/Kg		96	70 - 130	0	20
	Diesel Range Organics (Over C10-C28)	<50.0	U	999	829.3		mg/Kg		83	70 - 130	9	20

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 84 70 - 130 80 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-26566/1-A Client Sample ID: Method Blank **Matrix: Solid** 

Analysis Batch: 26664

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac D Chloride <5.00 U 5.00 06/01/22 18:09 mg/Kg

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

# QC Sample Results

Client: Ensolum Job ID: 890-2351-1 Project/Site: EVGSAU 3202-385

SDG: Lea County NM

**Prep Type: Soluble** 

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-26566/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 26664

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 224.5 mg/Kg 90 90 - 110

Lab Sample ID: LCSD 880-26566/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 26664** 

Spike LCSD LCSD %Rec RPD Added Result Qualifier Limit Analyte Unit D %Rec Limits RPD Chloride 250 226.0 mg/Kg 90 90 - 110

Lab Sample ID: 890-2350-A-3-B MS Client Sample ID: Matrix Spike

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 26664

MS MS %Rec Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit Limits Chloride 2430 1250 3737 104 90 - 110

Lab Sample ID: 890-2350-A-3-C MSD Client Sample ID: Matrix Spike Duplicate

mg/Kg

**Matrix: Solid** 

Analysis Batch: 26664

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Qualifier Unit %Rec RPD Limit Result D Limits 2430 1250 3765 Chloride 106 90 - 110 20 mg/Kg

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2351-1 SDG: Lea County NM

# **GC VOA**

# Prep Batch: 26459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-26459/5-A	Method Blank	Total/NA	Solid	5035	

#### Prep Batch: 26641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-1	SS06	Total/NA	Solid	5035	
890-2351-2	SS07	Total/NA	Solid	5035	
890-2351-3	SS08	Total/NA	Solid	5035	
890-2351-4	SS09	Total/NA	Solid	5035	
MB 880-26641/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-26641/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-26641/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-15346-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-15346-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### **Analysis Batch: 26715**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-1	SS06	Total/NA	Solid	8021B	26641
890-2351-2	SS07	Total/NA	Solid	8021B	26641
890-2351-3	SS08	Total/NA	Solid	8021B	26641
890-2351-4	SS09	Total/NA	Solid	8021B	26641
MB 880-26459/5-A	Method Blank	Total/NA	Solid	8021B	26459
MB 880-26641/5-A	Method Blank	Total/NA	Solid	8021B	26641
LCS 880-26641/1-A	Lab Control Sample	Total/NA	Solid	8021B	26641
LCSD 880-26641/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	26641
880-15346-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	26641
880-15346-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	26641

#### **Analysis Batch: 26785**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-5	SS10	Total/NA	Solid	8021B	26788
890-2351-6	SS11	Total/NA	Solid	8021B	26788
MB 880-26788/5-A	Method Blank	Total/NA	Solid	8021B	26788
LCS 880-26788/1-A	Lab Control Sample	Total/NA	Solid	8021B	26788
LCSD 880-26788/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	26788
890-2351-5 MS	SS10	Total/NA	Solid	8021B	26788
890-2351-5 MSD	SS10	Total/NA	Solid	8021B	26788

#### Prep Batch: 26788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
890-2351-5	SS10	Total/NA	Solid	5035	
890-2351-6	SS11	Total/NA	Solid	5035	
MB 880-26788/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-26788/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-26788/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2351-5 MS	SS10	Total/NA	Solid	5035	
890-2351-5 MSD	SS10	Total/NA	Solid	5035	

# Analysis Batch: 26801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-1	SS06	Total/NA	Solid	Total BTEX	
890-2351-2	SS07	Total/NA	Solid	Total BTEX	

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2351-1 SDG: Lea County NM

# **GC VOA (Continued)**

# **Analysis Batch: 26801 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-3	SS08	Total/NA	Solid	Total BTEX	
890-2351-4	SS09	Total/NA	Solid	Total BTEX	
890-2351-5	SS10	Total/NA	Solid	Total BTEX	
890-2351-6	SS11	Total/NA	Solid	Total BTEX	

#### **GC Semi VOA**

#### Analysis Batch: 26533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-1	SS06	Total/NA	Solid	8015B NM	26573
890-2351-2	SS07	Total/NA	Solid	8015B NM	26573
890-2351-3	SS08	Total/NA	Solid	8015B NM	26573
890-2351-4	SS09	Total/NA	Solid	8015B NM	26573
890-2351-5	SS10	Total/NA	Solid	8015B NM	26573
890-2351-6	SS11	Total/NA	Solid	8015B NM	26573
MB 880-26573/1-A	Method Blank	Total/NA	Solid	8015B NM	26573
LCS 880-26573/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26573
LCSD 880-26573/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26573
890-2348-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	26573
890-2348-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	26573

#### Prep Batch: 26573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-1	SS06	Total/NA	Solid	8015NM Prep	
890-2351-2	SS07	Total/NA	Solid	8015NM Prep	
890-2351-3	SS08	Total/NA	Solid	8015NM Prep	
890-2351-4	SS09	Total/NA	Solid	8015NM Prep	
890-2351-5	SS10	Total/NA	Solid	8015NM Prep	
890-2351-6	SS11	Total/NA	Solid	8015NM Prep	
MB 880-26573/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26573/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26573/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2348-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2348-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 26630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-1	SS06	Total/NA	Solid	8015 NM	<u> </u>
890-2351-2	SS07	Total/NA	Solid	8015 NM	
890-2351-3	SS08	Total/NA	Solid	8015 NM	
890-2351-4	SS09	Total/NA	Solid	8015 NM	
890-2351-5	SS10	Total/NA	Solid	8015 NM	
890-2351-6	SS11	Total/NA	Solid	8015 NM	

# HPLC/IC

#### Leach Batch: 26566

_					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-1	SS06	Soluble	Solid	DI Leach	
890-2351-2	SS07	Soluble	Solid	DI Leach	
890-2351-3	SS08	Soluble	Solid	DI Leach	
890-2351-4	SS09	Soluble	Solid	DI Leach	

**Eurofins Carlsbad** 

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Client: Ensolum

Project/Site: EVGSAU 3202-385

SDG: Lea County NM

# **HPLC/IC** (Continued)

# Leach Batch: 26566 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-5	SS10	Soluble	Solid	DI Leach	
890-2351-6	SS11	Soluble	Solid	DI Leach	
MB 880-26566/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-26566/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-26566/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2350-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2350-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

# Analysis Batch: 26664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2351-1	SS06	Soluble	Solid	300.0	26566
890-2351-2	SS07	Soluble	Solid	300.0	26566
890-2351-3	SS08	Soluble	Solid	300.0	26566
890-2351-4	SS09	Soluble	Solid	300.0	26566
890-2351-5	SS10	Soluble	Solid	300.0	26566
890-2351-6	SS11	Soluble	Solid	300.0	26566
MB 880-26566/1-A	Method Blank	Soluble	Solid	300.0	26566
LCS 880-26566/2-A	Lab Control Sample	Soluble	Solid	300.0	26566
LCSD 880-26566/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	26566
890-2350-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	26566
890-2350-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	26566

Job ID: 890-2351-1 SDG: Lea County NM

Client: Ensolum Project/Site: EVGSAU 3202-385

Lab Sample ID: 890-2351-1

**Client Sample ID: SS06** Date Collected: 05/26/22 12:10 Date Received: 05/26/22 16:45

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			4.99 g	5 mL	26641	06/01/22 10:48	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26715	06/03/22 07:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26801	06/03/22 10:04	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26630	06/01/22 09:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26573	05/31/22 11:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 01:11	SM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	26566	05/31/22 10:44	SC	XEN MID
Soluble	Analysis	300.0		1			26664	06/01/22 21:51	CH	XEN MID

**Client Sample ID: SS07** Lab Sample ID: 890-2351-2

Date Collected: 05/26/22 12:15 Matrix: Solid

Date Received: 05/26/22 16:45

	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	26641	06/01/22 10:48	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26715	06/03/22 08:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26801	06/03/22 10:04	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26630	06/01/22 09:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26573	05/31/22 11:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 01:33	SM	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	26566	05/31/22 10:44	SC	XEN MID
Soluble	Analysis	300.0		1			26664	06/01/22 22:00	CH	XEN MID

**Client Sample ID: SS08** Lab Sample ID: 890-2351-3

Date Collected: 05/26/22 12:50 Date Received: 05/26/22 16:45

	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	26641	06/01/22 10:48	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26715	06/03/22 08:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26801	06/03/22 10:04	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26630	06/01/22 09:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26573	05/31/22 11:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 02:16	SM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	26566	05/31/22 10:44	SC	XEN MID
Soluble	Analysis	300.0		1			26664	06/01/22 22:09	CH	XEN MID

**Client Sample ID: SS09** Lab Sample ID: 890-2351-4

Date Collected: 05/26/22 12:55 Date Received: 05/26/22 16:45

	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	26641	06/01/22 10:48	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26715	06/03/22 08:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26801	06/03/22 10:04	SM	XEN MID

**Eurofins Carlsbad** 

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Released to Imaging: 8/31/2022 3:50:18 PM

**Matrix: Solid** 

**Matrix: Solid** 

Job ID: 890-2351-1 SDG: Lea County NM

**Client Sample ID: SS09** 

Client: Ensolum

Lab Sample ID: 890-2351-4

Matrix: Solid

Date Collected: 05/26/22 12:55 Date Received: 05/26/22 16:45

Project/Site: EVGSAU 3202-385

	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			26630	06/01/22 09:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26573	05/31/22 11:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 02:38	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	26566	05/31/22 10:44	SC	XEN MID
Soluble	Analysis	300.0		1			26664	06/01/22 22:18	CH	XEN MID

Lab Sample ID: 890-2351-5

**Client Sample ID: SS10** Date Collected: 05/26/22 13:00 **Matrix: Solid** 

Date Received: 05/26/22 16:45

	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	26788	06/03/22 09:28	MR	XEN MID
Total/NA	Analysis	8021B		1			26785	06/03/22 12:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26801	06/03/22 10:04	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26630	06/01/22 09:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	26573	05/31/22 11:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 03:00	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	26566	05/31/22 10:44	SC	XEN MID
Soluble	Analysis	300.0		1			26664	06/01/22 22:27	CH	XEN MID

**Client Sample ID: SS11** Lab Sample ID: 890-2351-6

Date Collected: 05/26/22 13:05 **Matrix: Solid** Date Received: 05/26/22 16:45

	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	26788	06/03/22 09:28	MR	XEN MID
Total/NA	Analysis	8021B		1			26785	06/03/22 12:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26801	06/03/22 10:04	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26630	06/01/22 09:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	26573	05/31/22 11:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26533	06/01/22 03:22	SM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	26566	05/31/22 10:44	SC	XEN MID
Soluble	Analysis	300.0		1			26664	06/01/22 22:37	CH	XEN MID

**Laboratory References:** 

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

# **Accreditation/Certification Summary**

Client: Ensolum

Project/Site: EVGSAU 3202-385

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	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-21-22	06-30-22
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 th
the agency does not of Analysis Method	fer certification.  Prep Method	Matrix	Analyte	y moidde dhaiytee fer ti
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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

#### **Method Summary**

Client: Ensolum

Method

8021B

Total BTEX

8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

Project/Site: EVGSAU 3202-385

Job ID: 890-2351-1

SDG: Lea County NM

5 / 1	
Protocol	Laboratory
SW846	XEN MID
TAL SOP	XEN MID
SW846	XEN MID
SW846	XEN MID
MCAWW	XEN MID
SW846	XEN MID

XEN MID

XEN MID

SW846

ASTM

#### **Protocol References:**

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

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

#### **Sample Summary**

Client: Ensolum

Project/Site: EVGSAU 3202-385

Job ID: 890-2351-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2351-1	SS06	Solid	05/26/22 12:10	05/26/22 16:45	0.5
890-2351-2	SS07	Solid	05/26/22 12:15	05/26/22 16:45	0.5
890-2351-3	SS08	Solid	05/26/22 12:50	05/26/22 16:45	0.5
890-2351-4	SS09	Solid	05/26/22 12:55	05/26/22 16:45	0.5
890-2351-5	SS10	Solid	05/26/22 13:00	05/26/22 16:45	0.5
890-2351-6	SS11	Solid	05/26/22 13:05	05/26/22 16:45	0.5

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

Total 200.7 / 6010

200.8 / 6020:

otice: Signature of this document and relinquishment of samples service. Eurofins Xenco will be liable only for the cost of sample:

urofins Xenco. A minimum charge of \$85.00 will be applied to

Relinquished by: (Signature)

In our officer

5/26/22

eurofins 👺 Xenco Environm

City, State ZIP:

Address:

3122 Not Ensolum

arubad

17-683-2

roject Manager: ompany Name:

rain Jeni

Project Number: Project Name:

EVGSAU 32 03020240

Land Cant

NO.

Sampler's Name: roject Location:

2

Temp Blank: (Yes) No

## Chain of Custody

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

	EL Paso, TX (915)	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	(806) 794-1296		
	Hobbs, NM (575)	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	A (575) 988-3199	www.xenco.com	m Page of
MAS BILL	Bill to: (if different)			Work Order Comments	mm
	Company Name:		7	Program: UST/PST   PRP Br	Brownfields RRC Superfund
PORS HWY AND	Address:			roject:	
	City, State ZIP:		F	Reporting: Level II   Level III   PST/UST	PST/UST TRRP Level IV
nail:	CIENNING	( @ensownha-	Can	Deliverables: EDD AD	ADaPT Other:
2-385 Turn Around			ANALYSIS REQUEST		Preservative Codes
<b>X</b> Routine	Rush Pres.				None: NO DI Water: H <sub>2</sub> O
Due Date:		)			Cool: Cool MeOH: Me
TAT starts the day received by the lab, if received by 4:30pm		300			HCL: HC HNO 3: HN H <sub>2</sub> SO 4: H <sub>2</sub> NaOH: Na
Yes No Wetke: 7	No neters	80			H <sub>3</sub> PO <sub>4</sub> : HP
hermometer ID:	_	PA			NaHSO 4: NABIS
emperature Reading:		(E	890-2351 Chain of Custody	Custody	Zn Acetate+NaOH: Zn
orrected Temperature:	7.0	EX			NaOH+Ascorbic Acid: SAPC
Date Time De	Depth Grab/ # of Cont				Sample Comments
हार्या प्रमा	-	X X X			
12.5					
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8RCRA 13PPM zed TCLP/SPLP	13PPM Texas 11 Al Sb As Ba CLP/SPLP6010 : 8RCRA Sb As Ba	s Ba Be B Cd Ca As Ba Be Cd Cr C	A 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo NiTCLP/SPLP6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Vi K Se	Ag SiO <sub>2</sub> Na Sr Tl Sn U V Zn Hg: 1631 / 245.1 / 7470 / 7471
constitutes a valid purchase order fro and shall not assume any responsibil each project and a charge of \$5 for ea	m client company to Eurofins ity for any losses or expenses i sch sample submitted to Eurof	Xenco, its affiliates and sub Incurred by the client if sucl fins Xenco, but not analyzes	constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions 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 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	conditions the control riously negotiated.	
Received by: (Signature)	D	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	re) Date/Time

Sample Custody Seals:

Yes No N/A Yes No ATTA

otal Containers:

Sample Identification

Matrix

3508 **8509** 

5510

SSOT 2800 Samples Received Intact: SAMPLE RECEIPT

Cooler Custody Seals:

Revised Date: 08/25/2020 Rev. 2020.2

#### **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-2351-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 2351 List Number: 1 Creator: Clifton, Cloe

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

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<6mm (1/4").

#### **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-2351-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 05/31/22 08:34 AM

Login Number: 2351 List Number: 2

Creator: Rodriguez, Leticia

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



## **Environment Testing America**

## **ANALYTICAL REPORT**

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

Laboratory Job ID: 890-2747-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: EVGSAU 3202-383

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 8/18/2022 9:48:50 AM

Jessica Kramer, Project Manager (432)704-5440

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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: EVGSAU 3202-383
Laboratory Job ID: 890-2747-1
SDG: Lea County NM

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#### **Definitions/Glossary**

Job ID: 890-2747-1 Client: Ensolum Project/Site: EVGSAU 3202-383 SDG: Lea County NM

#### **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, low biased.

\*1

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

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description** 

U Indicates the analyte was analyzed for but not detected.

#### **Glossary**

DL, RA, RE, IN

DLC

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)

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

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE) MCL EPA recommended "Maximum Contaminant Level"

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

Decision Level Concentration (Radiochemistry)

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

NC Not Calculated

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

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

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

Relative Error Ratio (Radiochemistry) **RER** 

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

**TNTC** Too Numerous To Count

#### **Case Narrative**

Client: Ensolum

Job ID: 890-2747-1 Project/Site: EVGSAU 3202-383 SDG: Lea County NM

Job ID: 890-2747-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2747-1

#### Receipt

The samples were received on 8/11/2022 3:27 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

#### **GC VOA**

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

#### GC Semi VOA

Method 8015MOD NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-32109 and analytical batch 880-32125 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD\_NM: Gasoline range hydrocarbons biased low in LCSD. Since only an acceptable LCS is required per the method, the data has been qualified and reported.(LCSD 880-32109/3-A)

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.

Lab Sample ID: 890-2747-1

#### **Client Sample Results**

Client: Ensolum

Job ID: 890-2747-1

Project/Site: EVGSAU 3202-383

SDG: Lea County NM

**Client Sample ID: FS01** 

Date Collected: 08/10/22 12:00 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 11:31	08/17/22 00:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 11:31	08/17/22 00:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 11:31	08/17/22 00:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 11:31	08/17/22 00:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 11:31	08/17/22 00:10	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 11:31	08/17/22 00:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			08/16/22 11:31	08/17/22 00:10	1
1,4-Difluorobenzene (Surr)	98		70 - 130			08/16/22 11:31	08/17/22 00:10	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00400	U	0.00400	mg/Kg			08/17/22 08:24	1
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			08/16/22 10:53	1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *- *1	50.0	mg/Kg		08/15/22 10:00	08/15/22 16:47	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		08/15/22 10:00	08/15/22 16:47	
C10-C28)								1
C10-C28) OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/15/22 10:00	08/15/22 16:47	
,	<50.0		50.0 <b>Limits</b>	mg/Kg		08/15/22 10:00  Prepared	08/15/22 16:47  Analyzed	1
Oll Range Organics (Over C28-C36)				mg/Kg				1 Dil Fac
Oll Range Organics (Over C28-C36)  Surrogate	%Recovery		Limits	mg/Kg		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane	%Recovery 115 110	Qualifier	Limits 70 - 130	mg/Kg		<b>Prepared</b> 08/15/22 10:00	Analyzed 08/15/22 16:47	1 1 <b>Dil Fac</b> 1
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane o-Terphenyl	%Recovery 115 110  omatography -	Qualifier	Limits 70 - 130	mg/Kg Unit	D	<b>Prepared</b> 08/15/22 10:00	Analyzed 08/15/22 16:47	1 <b>Dil Fac</b>

**Client Sample ID: FS02** 

Date Collected: 08/11/22 10:00 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 11:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 11:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 11:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 11:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 11:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 11:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130			08/16/22 16:10	08/17/22 11:14	

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Lab Sample ID: 890-2747-2

Matrix: Solid

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Lab Sample ID: 890-2747-2

Client: Ensolum Job ID: 890-2747-1 Project/Site: EVGSAU 3202-383 SDG: Lea County NM

**Client Sample ID: FS02** 

Date Collected: 08/11/22 10:00 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compou	unds (GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97	70 - 130	08/16/22 16:10	08/17/22 11:14	1

Method: Total E	BTEX - Total	BTEX C	alculation
Mictilioa. Total L	JIEA - IOLUI	DILA	aiculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			08/17/22 08:24	1

1					
Moth	nod: 8015 NM	Diocal Bana	o Organica	IDDOVIC	105
INIELI	IOU. OU 15 INIVI	- Diesei Kang	e Organics	ין נטאטן	3C)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	245	49.9	mg/Kg			08/16/22 10:53	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- *1	49.9	mg/Kg		08/15/22 10:00	08/15/22 17:08	1
Diesel Range Organics (Over C10-C28)	245		49.9	mg/Kg		08/15/22 10:00	08/15/22 17:08	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/15/22 10:00	08/15/22 17:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	<u></u>	08/15/22 10:00	08/15/22 17:08	1
o-Terphenyl	108		70 - 130	0	08/15/22 10:00	08/15/22 17:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3750	25.0	mg/Kg			08/17/22 22:29	5

**Client Sample ID: FS03** Lab Sample ID: 890-2747-3

Date Collected: 08/11/22 10:10 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Method: 8021B - '	Volatila	Organic (	Compounds	(CC)

mounda. our ib volutile orga	ino compoundo (	(33)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 11:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 11:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 11:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 11:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 11:40	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 11:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130			08/16/22 16:10	08/17/22 11:40	1
1,4-Difluorobenzene (Surr)	93		70 - 130			08/16/22 16:10	08/17/22 11:40	1

Method:	Total R	TFY - T	ntal RT	FX Calcu	ılation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00400	U	0.00400	ma/Ka			08/17/22 08:24	1

	Method: 8015 NM -	- Diesel Range	<b>Organics</b>	(DRO)	(GC)
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Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	132	50.0	mg/Kg			08/16/22 10:53	1

**Eurofins Carlsbad** 

Matrix: Solid

Matrix: Solid

Lab Sample ID: 890-2747-3

#### **Client Sample Results**

Client: Ensolum Job ID: 890-2747-1 Project/Site: EVGSAU 3202-383 SDG: Lea County NM

**Client Sample ID: FS03** 

Date Collected: 08/11/22 10:10 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *- *1	50.0	mg/Kg		08/15/22 10:00	08/15/22 17:30	1
(GRO)-C6-C10								
Diesel Range Organics (Over	132		50.0	mg/Kg		08/15/22 10:00	08/15/22 17:30	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/15/22 10:00	08/15/22 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			08/15/22 10:00	08/15/22 17:30	1
o-Terphenyl	105		70 - 130			08/15/22 10:00	08/15/22 17:30	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1510		25.0	mg/Kg			08/17/22 22:37	5

Lab Sample ID: 890-2747-4 **Client Sample ID: FS04** 

Date Collected: 08/11/22 10:30

Date Received: 08/11/22 15:27

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 12:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 12:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			08/16/22 16:10	08/17/22 12:06	1
1,4-Difluorobenzene (Surr)	82		70 - 130			08/16/22 16:10	08/17/22 12:06	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			08/17/22 08:24	1
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	<b>RL</b> 50.0	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 08/16/22 10:53	Dil Fac
Analyte	Result   <50.0	Qualifier U			<u>D</u>	Prepared		
Analyte Total TPH	Result <50.0	Qualifier U			<u>D</u>	Prepared Prepared		
Analyte Total TPH   Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U	50.0	mg/Kg		<u> </u>	08/16/22 10:53	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0	Qualifier U  RO) (GC) Qualifier U *- *1	50.0	mg/Kg		Prepared	08/16/22 10:53  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result Georganics (Diameter) Result 	Qualifier U  RO) (GC) Qualifier U *- *1	50.0 RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 08/15/22 10:00	08/16/22 10:53  Analyzed  08/15/22 17:51	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U  RO) (GC) Qualifier U *- *1 U	50.0  RL  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 08/15/22 10:00 08/15/22 10:00	08/16/22 10:53  Analyzed  08/15/22 17:51  08/15/22 17:51	1 Dil Fac 1 1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U  RO) (GC) Qualifier U *- *1 U	50.0  RL  50.0  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 08/15/22 10:00 08/15/22 10:00 08/15/22 10:00	08/16/22 10:53  Analyzed 08/15/22 17:51 08/15/22 17:51	1 Dil Fac

Client: Ensolum Job ID: 890-2747-1 Project/Site: EVGSAU 3202-383 SDG: Lea County NM

**Client Sample ID: FS04** Lab Sample ID: 890-2747-4

Date Collected: 08/11/22 10:30 Matrix: Solid

Date Received: 08/11/22 15:27 Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1690		25.0	mg/Kg			08/17/22 22:45	5

**Client Sample ID: FS05** Lab Sample ID: 890-2747-5

Date Collected: 08/10/22 14:00 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 12:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 12:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130			08/16/22 16:10	08/17/22 12:32	1
1,4-Difluorobenzene (Surr)	88		70 - 130			08/16/22 16:10	08/17/22 12:32	1
- Method: Total BTEX - Total B1	TEX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	11	0.00400	mg/Kg			08/17/22 08:24	

	\0.00 <del>4</del> 00	U	0.00400	mg/itg			00/17/22 00:24	'
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.6		50.0	mg/Kg			08/16/22 10:53	1
- Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *- *1	50.0	mg/Kg		08/15/22 10:00	08/15/22 18:12	1
(GRO)-C6-C10								
Diesel Range Organics (Over	55.6		50.0	mg/Kg		08/15/22 10:00	08/15/22 18:12	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/15/22 10:00	08/15/22 18:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			08/15/22 10:00	08/15/22 18:12	1
o-Terphenyl	104		70 - 130			08/15/22 10:00	08/15/22 18:12	1

Method: 300.0 - Anions, Ion Chroma	atography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	901	5.02	mg/Kg			08/17/22 22:53	1

**Eurofins Carlsbad** 

Matrix: Solid

Lab Sample ID: 890-2747-6

#### **Client Sample Results**

Client: Ensolum

Job ID: 890-2747-1

Project/Site: EVGSAU 3202-383

SDG: Lea County NM

Client Sample ID: FS06

Date Collected: 08/10/22 14:30 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 12:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 12:58	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 12:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			08/16/22 16:10	08/17/22 12:58	1
1,4-Difluorobenzene (Surr)	92		70 - 130			08/16/22 16:10	08/17/22 12:58	1
Method: Total BTEX - Total BTEX	( Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	267		49.9	mg/Kg			08/16/22 10:53	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- *1	49.9	mg/Kg		08/15/22 10:00	08/15/22 18:34	1
Diesel Range Organics (Over C10-C28)	267		49.9	mg/Kg		08/15/22 10:00	08/15/22 18:34	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/15/22 10:00	08/15/22 18:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			08/15/22 10:00	08/15/22 18:34	1
o-Terphenyl	106		70 - 130			08/15/22 10:00	08/15/22 18:34	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
,	3							
Analyte		Qualifier	RL 4.97	Unit mg/Kg	D	Prepared	Analyzed	Dil Fac

**Client Sample ID: FS07** 

Date Collected: 08/11/22 10:40 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 13:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 13:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 13:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 13:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 13:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 13:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			08/16/22 16:10	08/17/22 13:23	1

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Lab Sample ID: 890-2747-7

Matrix: Solid

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Lab Sample ID: 890-2747-7

08/17/22 23:09

#### **Client Sample Results**

Client: Ensolum

Job ID: 890-2747-1

Project/Site: EVGSAU 3202-383

SDG: Lea County NM

**Client Sample ID: FS07** 

Date Collected: 08/11/22 10:40 Date Received: 08/11/22 15:27

Sample Depth: 0.5

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	87		70 - 130			08/16/22 16:10	08/17/22 13:23	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			08/17/22 08:24	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.3		49.8	mg/Kg			08/16/22 10:53	1
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang	je Organics (Di	RO) (GC)						
Gasoline Range Organics	<49.8	U *- *1	49.8	mg/Kg		08/15/22 10:00	08/15/22 18:55	1
(GRO)-C6-C10  Diesel Range Organics (Over	58.3		49.8	mg/Kg		08/15/22 10:00	08/15/22 18:55	1
C10-C28)	30.3		10.0	mgmvg		00/10/22 10:00	00/10/22 10:00	•
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		08/15/22 10:00	08/15/22 18:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130			08/15/22 10:00	08/15/22 18:55	1
o-Terphenyl	109		70 - 130			08/15/22 10:00	08/15/22 18:55	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

25.2

mg/Kg

1460

#### **Surrogate Summary**

Client: Ensolum Job ID: 890-2747-1 Project/Site: EVGSAU 3202-383 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-18047-A-1-F MS	Matrix Spike	105	98	
880-18047-A-1-G MSD	Matrix Spike Duplicate	112	108	
880-18062-A-1-E MS	Matrix Spike	101	105	
880-18062-A-1-F MSD	Matrix Spike Duplicate	56 S1-	64 S1-	
890-2747-1	FS01	107	98	
890-2747-2	FS02	129	97	
890-2747-3	FS03	128	93	
890-2747-4	FS04	95	82	
890-2747-5	FS05	119	88	
890-2747-6	FS06	118	92	
890-2747-7	FS07	126	87	
LCS 880-32250/1-A	Lab Control Sample	95	99	
LCS 880-32273/1-A	Lab Control Sample	108	107	
LCSD 880-32250/2-A	Lab Control Sample Dup	103	94	
LCSD 880-32273/2-A	Lab Control Sample Dup	106	92	
MB 880-32250/5-A	Method Blank	77	0.7 S1-	
MB 880-32273/5-A	Method Blank	79	93	

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-18047-A-1-B MS	Matrix Spike	118	108	
880-18047-A-1-C MSD	Matrix Spike Duplicate	117	107	
890-2747-1	FS01	115	110	
890-2747-2	FS02	110	108	
890-2747-3	FS03	108	105	
890-2747-4	FS04	107	105	
890-2747-5	FS05	106	104	
890-2747-6	FS06	108	106	
890-2747-7	FS07	111	109	
LCS 880-32109/2-A	Lab Control Sample	129	114	
LCSD 880-32109/3-A	Lab Control Sample Dup	116	113	
MB 880-32109/1-A	Method Blank	110	104	

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2747-1
Project/Site: EVGSAU 3202-383 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-32250/5-A

Lab Sample ID: LCS 880-32250/1-A

Matrix: Solid

Analysis Batch: 32252

Matrix: Solid Analysis Batch: 32252 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32250

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 11:31	08/16/22 14:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 11:31	08/16/22 14:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 11:31	08/16/22 14:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 11:31	08/16/22 14:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 11:31	08/16/22 14:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 11:31	08/16/22 14:01	1

MB MB

Surrogate	%Recovery (	Qualifier	Limits	Pr	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	08/16	6/22 11:31	08/16/22 14:01	1
1,4-Difluorobenzene (Surr)	0.7 \$	S1-	70 - 130	08/16	6/22 11:31	08/16/22 14:01	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32250

Prep Type: Total/NA

Prep Batch: 32250

35

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0996	0.1004		mg/Kg		101	70 - 130	
Toluene	0.0996	0.09472		mg/Kg		95	70 - 130	
Ethylbenzene	0.0996	0.09812		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.199	0.1961		mg/Kg		98	70 - 130	
o-Xylene	0.0996	0.09551		mg/Kg		96	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: LCSD 880-32250/2-A Client Sample ID: Lab Control Sample Dup

0.09639

0.100

Matrix: Solid

Analyte
Benzene
Toluene
Ethylbenzene
m-Xylene & p-Xylene

o-Xylene

Analysis Batch: 32252

Spike	LCSD	LCSD				%Rec		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.100	0.09752		mg/Kg		98	70 - 130	3	35
0.100	0.09550		mg/Kg		95	70 - 130	1	35
0.100	0.09921		mg/Kg		99	70 - 130	1	35
0.200	0.1979		mg/Kg		99	70 - 130	1	35

mg/Kg

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1.4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-18062-A-1-E MS

**Matrix: Solid** 

Analysis Batch: 32252

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

70 - 130

Prep Batch: 32250

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 101
 70 - 130

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Client: Ensolum Project/Site: EVGSAU 3202-383

MS MS

Job ID: 890-2747-1 SDG: Lea County NM

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

Lab Sample ID: 880-18062-A-1-E MS

**Matrix: Solid** 

Analysis Batch: 32252

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 32250

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 32250

Lab Sample ID: 880-18062-A-1-F MSD

**Matrix: Solid** 

**Analysis Batch: 32252** 

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130

Lab Sample ID: MB 880-32273/5-A Client Sample ID: Method Blank

**Matrix: Solid** 

Analysis Batch: 32252

Prep Type: Total/NA

Prep Batch: 32273

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 03:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 03:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 03:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 03:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/16/22 16:10	08/17/22 03:16	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/16/22 16:10	08/17/22 03:16	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	08/16/22 16:10	08/17/22 03:16	1
1,4-Difluorobenzene (Surr)	93		70 - 130	08/16/22 16:10	08/17/22 03:16	1

Lab Sample ID: LCS 880-32273/1-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

Analysis Batch: 32252

Prep Type: Total/NA Prep Batch: 32273

	<b>Spike</b>	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0996	0.09895		mg/Kg		99	70 - 130	
Toluene	0.0996	0.09543		mg/Kg		96	70 - 130	
Ethylbenzene	0.0996	0.09908		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.199	0.1973		mg/Kg		99	70 - 130	
o-Xylene	0.0996	0.09797		mg/Kg		98	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-32273/2-A

Released to Imaging: 8/31/2022 3:50:18 PM

**Matrix: Solid** 

Analysis Batch: 32252

Client Sample ID:	Lab Control Sample	e Dup

Prep Type: Total/NA

Prep Batch: 32273

LCSD LCSD RPD Spike %Rec Limits Analyte Added Result Qualifier Unit %Rec **RPD** Limit 35 0.0998 100 Benzene 0.09959 mg/Kg 70 - 130 Toluene 0.0998 0.09606 mg/Kg 96 70 - 130

#### **QC Sample Results**

Client: Ensolum Job ID: 890-2747-1
Project/Site: EVGSAU 3202-383 SDG: Lea County NM

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

Lab Sample ID: LCSD 880-32273/2-A

Matrix: Solid

Analysis Batch: 32252

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32273

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ethylbenzene	0.0998	0.09774		mg/Kg		98	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1945		mg/Kg		97	70 - 130	1	35
o-Xylene	0.0998	0.09851		mg/Kg		99	70 - 130	1	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-18047-A-1-F MS

Matrix: Solid

Analysis Batch: 32252

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 32273

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.100	0.08457		mg/Kg		85	70 - 130	
Toluene	<0.00200	U	0.100	0.08279		mg/Kg		83	70 - 130	
Ethylbenzene	<0.00200	U	0.100	0.08320		mg/Kg		83	70 - 130	
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1659		mg/Kg		83	70 - 130	
o-Xylene	<0.00200	U	0.100	0.08146		mg/Kg		81	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-18047-A-1-G MSD

Matrix: Solid

**Analysis Batch: 32252** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 32273

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.100	0.1042		mg/Kg		104	70 - 130	21	35
Toluene	<0.00200	U	0.100	0.08879		mg/Kg		89	70 - 130	7	35
Ethylbenzene	<0.00200	U	0.100	0.08877		mg/Kg		89	70 - 130	6	35
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1760		mg/Kg		88	70 - 130	6	35
o-Xylene	<0.00200	U	0.100	0.08715		mg/Kg		87	70 - 130	7	35

MSD MSD

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

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

Lab Sample ID: MB 880-32109/1-A

Matrix: Solid

Analysis Batch: 32125

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32109

	IVID	IVID						
Analyte Re	esult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics <	50.0	U	50.0	mg/Kg		08/12/22 15:08	08/15/22 10:19	1
(GRO)-C6-C10								
Diesel Range Organics (Over	50.0	U	50.0	mg/Kg		08/12/22 15:08	08/15/22 10:19	1
C10-C28)								

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Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

**Prep Type: Total/NA** 

Prep Type: Total/NA

Prep Batch: 32109

Client: Ensolum Job ID: 890-2747-1 Project/Site: EVGSAU 3202-383 SDG: Lea County NM

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

Lab Sample ID: MB 880-32109/1-A

**Matrix: Solid** Analysis Batch: 32125

	MB	MB	МВ								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/12/22 15:08	08/15/22 10:19	1			

	MB	МВ				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	08/12/22 15:08	08/15/22 10:19	1
o-Terphenyl	104		70 - 130	08/12/22 15:08	08/15/22 10:19	1

Lab Sample ID: LCS 880-32109/2-A

**Matrix: Solid** Analysis Batch: 32125

Analysis Batch: 32125							Prep Batch: 32109		
	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	828.5		mg/Kg		83	70 - 130		
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1087		ma/Ka		109	70 - 130		

C10-C28)

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	129		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: LCSD 880-32109/3-A

**Matrix: Solid** 

Analysis Batch: 32125						Prep Batch: 32109				
	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	587.8	*- *1	mg/Kg		59	70 - 130	34	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1080		mg/Kg		108	70 - 130	1	20	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 880-18047-A-1-B MS

C10-C28)

Analysis Batch: 32125

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

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- *1	999	717.9		mg/Kg		72	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1298		mg/Kg		130	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	108		70 - 130

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Prep Type: Total/NA

Prep Batch: 32109

Lab Sample ID: 880-18047-A-1-C MSD

#### QC Sample Results

Client: Ensolum Job ID: 890-2747-1 Project/Site: EVGSAU 3202-383 SDG: Lea County NM

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 32109

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U *- *1	999	722.0		mg/Kg		72	70 - 130	1	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U F1	999	1305	F1	mg/Kg		131	70 - 130	1	20
C10-C28)											

C10-C28)

**Matrix: Solid** 

Analysis Batch: 32125

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	117	70 - 130
o-Terphenyl	107	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32161/1-A Client Sample ID: Method Blank

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 32247

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			08/17/22 19:13	1

Lab Sample ID: LCS 880-32161/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 32247** 

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	248.5		mg/Kg		99	90 - 110	

Lab Sample ID: LCSD 880-32161/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 32247

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	248.7		mg/Kg		99	90 - 110	0	20	

Lab Sample ID: 880-18043-A-11-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 32247

	Sample	Sample	<b>Spike</b>	IVIS	IVIS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	226		250	478.8		mg/Kg		101	90 - 110	

Lab Sample ID: 880-18043-A-11-D MSD

**Matrix: Solid** 

Analysis Batch: 32247

Alialysis Datcii. 32241											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	226		250	478.1		mg/Kg		101	90 - 110		20

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

Client Sample ID: Matrix Spike Duplicate

#### **QC Association Summary**

Client: Ensolum

Project/Site: EVGSAU 3202-383

Job ID: 890-2747-1 SDG: Lea County NM

#### **GC VOA**

#### Prep Batch: 32250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-1	FS01	Total/NA	Solid	5035	
MB 880-32250/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-32250/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-32250/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18062-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-18062-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Analysis Batch: 32252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-1	FS01	Total/NA	Solid	8021B	32250
890-2747-2	FS02	Total/NA	Solid	8021B	32273
890-2747-3	FS03	Total/NA	Solid	8021B	32273
890-2747-4	FS04	Total/NA	Solid	8021B	32273
890-2747-5	FS05	Total/NA	Solid	8021B	32273
890-2747-6	FS06	Total/NA	Solid	8021B	32273
890-2747-7	FS07	Total/NA	Solid	8021B	32273
MB 880-32250/5-A	Method Blank	Total/NA	Solid	8021B	32250
MB 880-32273/5-A	Method Blank	Total/NA	Solid	8021B	32273
LCS 880-32250/1-A	Lab Control Sample	Total/NA	Solid	8021B	32250
LCS 880-32273/1-A	Lab Control Sample	Total/NA	Solid	8021B	32273
LCSD 880-32250/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	32250
LCSD 880-32273/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	32273
880-18047-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	32273
880-18047-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	32273
880-18062-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	32250
880-18062-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	32250

#### Prep Batch: 32273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-2	FS02	Total/NA	Solid	5035	
890-2747-3	FS03	Total/NA	Solid	5035	
890-2747-4	FS04	Total/NA	Solid	5035	
890-2747-5	FS05	Total/NA	Solid	5035	
890-2747-6	FS06	Total/NA	Solid	5035	
890-2747-7	FS07	Total/NA	Solid	5035	
MB 880-32273/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-32273/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-32273/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18047-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
880-18047-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### **Analysis Batch: 32298**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-1	FS01	Total/NA	Solid	Total BTEX	
890-2747-2	FS02	Total/NA	Solid	Total BTEX	
890-2747-3	FS03	Total/NA	Solid	Total BTEX	
890-2747-4	FS04	Total/NA	Solid	Total BTEX	
890-2747-5	FS05	Total/NA	Solid	Total BTEX	
890-2747-6	FS06	Total/NA	Solid	Total BTEX	
890-2747-7	FS07	Total/NA	Solid	Total BTEX	

**Eurofins Carlsbad** 

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## **QC Association Summary**

Client: Ensolum

Job ID: 890-2747-1 Project/Site: EVGSAU 3202-383 SDG: Lea County NM

#### GC Semi VOA

#### Prep Batch: 32109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-1	FS01	Total/NA	Solid	8015NM Prep	
890-2747-2	FS02	Total/NA	Solid	8015NM Prep	
890-2747-3	FS03	Total/NA	Solid	8015NM Prep	
890-2747-4	FS04	Total/NA	Solid	8015NM Prep	
890-2747-5	FS05	Total/NA	Solid	8015NM Prep	
890-2747-6	FS06	Total/NA	Solid	8015NM Prep	
890-2747-7	FS07	Total/NA	Solid	8015NM Prep	
MB 880-32109/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32109/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32109/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-18047-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-18047-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 32125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-1	FS01	Total/NA	Solid	8015B NM	32109
890-2747-2	FS02	Total/NA	Solid	8015B NM	32109
890-2747-3	FS03	Total/NA	Solid	8015B NM	32109
890-2747-4	FS04	Total/NA	Solid	8015B NM	32109
890-2747-5	FS05	Total/NA	Solid	8015B NM	32109
890-2747-6	FS06	Total/NA	Solid	8015B NM	32109
890-2747-7	FS07	Total/NA	Solid	8015B NM	32109
MB 880-32109/1-A	Method Blank	Total/NA	Solid	8015B NM	32109
LCS 880-32109/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32109
LCSD 880-32109/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32109
880-18047-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	32109
880-18047-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	32109

#### Analysis Batch: 32246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-1	FS01	Total/NA	Solid	8015 NM	
890-2747-2	FS02	Total/NA	Solid	8015 NM	
890-2747-3	FS03	Total/NA	Solid	8015 NM	
890-2747-4	FS04	Total/NA	Solid	8015 NM	
890-2747-5	FS05	Total/NA	Solid	8015 NM	
890-2747-6	FS06	Total/NA	Solid	8015 NM	
890-2747-7	FS07	Total/NA	Solid	8015 NM	

#### HPLC/IC

#### Leach Batch: 32161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-1	FS01	Soluble	Solid	DI Leach	
890-2747-2	FS02	Soluble	Solid	DI Leach	
890-2747-3	FS03	Soluble	Solid	DI Leach	
890-2747-4	FS04	Soluble	Solid	DI Leach	
890-2747-5	FS05	Soluble	Solid	DI Leach	
890-2747-6	FS06	Soluble	Solid	DI Leach	
890-2747-7	FS07	Soluble	Solid	DI Leach	
MB 880-32161/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32161/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

## **QC Association Summary**

Client: Ensolum

Project/Site: EVGSAU 3202-383

Job ID: 890-2747-1

SDG: Lea County NM

**HPLC/IC** (Continued)

#### Leach Batch: 32161 (Continued)

Released to Imaging: 8/31/2022 3:50:18 PM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-32161/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	_
880-18043-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18043-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### Analysis Batch: 32247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2747-1	FS01	Soluble	Solid	300.0	32161
890-2747-2	FS02	Soluble	Solid	300.0	32161
890-2747-3	FS03	Soluble	Solid	300.0	32161
890-2747-4	FS04	Soluble	Solid	300.0	32161
890-2747-5	FS05	Soluble	Solid	300.0	32161
890-2747-6	FS06	Soluble	Solid	300.0	32161
890-2747-7	FS07	Soluble	Solid	300.0	32161
MB 880-32161/1-A	Method Blank	Soluble	Solid	300.0	32161
LCS 880-32161/2-A	Lab Control Sample	Soluble	Solid	300.0	32161
LCSD 880-32161/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32161
880-18043-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	32161
880-18043-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	32161

**Eurofins Carlsbad** 

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Job ID: 890-2747-1 SDG: Lea County NM

Client: Ensolum Project/Site: EVGSAU 3202-383

Lab Sample ID: 890-2747-1

08/15/22 11:27

08/17/22 22:29

KS

СН

EET MID

**EET MID** 

Date Collected: 08/10/22 12:00 Date Received: 08/11/22 15:27

**Client Sample ID: FS01** 

Soluble

Soluble

Leach

Analysis

DI Leach

300.0

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			5.00 g	5.00 g	32250	08/16/22 11:31	AJ	EET MID
Total/NA	Analysis	8021B		1			32252	08/17/22 00:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			32298	08/17/22 08:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			32246	08/16/22 10:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32109	08/15/22 10:00	DM	EET MID
Total/NA	Analysis	8015B NM		1			32125	08/15/22 16:47	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32161	08/15/22 11:27	KS	EET MID
Soluble	Analysis	300.0		5			32247	08/17/22 22:22	CH	EET MID

Lab Sample ID: 890-2747-2 **Client Sample ID: FS02** 

Date Collected: 08/11/22 10:00 Matrix: Solid Date Received: 08/11/22 15:27

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.99 g 32273 08/16/22 16:10 AJ EET MID 4.99 g Total/NA 8021B 32252 08/17/22 11:14 **EET MID** Analysis 1 AJ Total/NA Total BTEX 32298 08/17/22 08:24 Analysis 1 A.I **EET MID** Total/NA Analysis 8015 NM 32246 08/16/22 10:53 SM **EET MID** Total/NA 32109 08/15/22 10:00 Prep 8015NM Prep 10.02 g DM EET MID 10 mL Total/NA Analysis 8015B NM 32125 08/15/22 17:08 SM **EET MID** 

**Client Sample ID: FS03** Lab Sample ID: 890-2747-3

5.01 g

50 mL

32161

32247

Date Collected: 08/11/22 10:10 **Matrix: Solid** Date Received: 08/11/22 15:27

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	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	4.98 g	32273	08/16/22 16:10	AJ	EET MID
Total/NA	Analysis	8021B		1			32252	08/17/22 11:40	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			32298	08/17/22 08:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			32246	08/16/22 10:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32109	08/15/22 10:00	DM	EET MID
Total/NA	Analysis	8015B NM		1			32125	08/15/22 17:30	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	32161	08/15/22 11:27	KS	EET MID
Soluble	Analysis	300.0		5			32247	08/17/22 22:37	CH	EET MID

Lab Sample ID: 890-2747-4 **Client Sample ID: FS04** 

Date Collected: 08/11/22 10:30 Matrix: Solid Date Received: 08/11/22 15:27

	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	5.01 g	32273	08/16/22 16:10	AJ	EET MID
Total/NA	Analysis	8021B		1			32252	08/17/22 12:06	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			32298	08/17/22 08:24	AJ	EET MID

Lab Cili

Client: Ensolum Project/Site: EVGSAU 3202-383 Job ID: 890-2747-1 SDG: Lea County NM

Client Sample ID: FS04

Lab Sample ID: 890-2747-4

Matrix: Solid

Date Collected: 08/11/22 10:30 Date Received: 08/11/22 15:27

	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			32246	08/16/22 10:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32109	08/15/22 10:00	DM	EET MID
Total/NA	Analysis	8015B NM		1			32125	08/15/22 17:51	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	32161	08/15/22 11:27	KS	EET MID
Soluble	Analysis	300.0		5			32247	08/17/22 22:45	CH	EET MID

Client Sample ID: FS05 Lab Sample ID: 890-2747-5

Date Collected: 08/10/22 14:00 Matrix: Solid

Date Received: 08/11/22 15:27

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5.00 g	32273	08/16/22 16:10	AJ	EET MID
Total/NA	Analysis	8021B		1			32252	08/17/22 12:32	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			32298	08/17/22 08:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			32246	08/16/22 10:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32109	08/15/22 10:00	DM	EET MID
Total/NA	Analysis	8015B NM		1			32125	08/15/22 18:12	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32161	08/15/22 11:27	KS	EET MID
Soluble	Analysis	300.0		1			32247	08/17/22 22:53	CH	EET MID

Client Sample ID: FS06 Lab Sample ID: 890-2747-6

Date Collected: 08/10/22 14:30
Date Received: 08/11/22 15:27

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	4.96 g	32273	08/16/22 16:10	AJ	EET MID
Total/NA	Analysis	8021B		1			32252	08/17/22 12:58	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			32298	08/17/22 08:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			32246	08/16/22 10:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32109	08/15/22 10:00	DM	EET MID
Total/NA	Analysis	8015B NM		1			32125	08/15/22 18:34	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	32161	08/15/22 11:27	KS	EET MID
Soluble	Analysis	300.0		1			32247	08/17/22 23:01	CH	EET MID

Client Sample ID: FS07 Lab Sample ID: 890-2747-7

Date Collected: 08/11/22 10:40 Date Received: 08/11/22 15:27

	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	4.97 g	32273	08/16/22 16:10	AJ	EET MID
Total/NA	Analysis	8021B		1			32252	08/17/22 13:23	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			32298	08/17/22 08:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			32246	08/16/22 10:53	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.04 g	10 mL	32109 32125	08/15/22 10:00 08/15/22 18:55	DM SM	EET MID EET MID

**Eurofins Carlsbad** 

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890-2747-7 Matrix: Solid

**Matrix: Solid** 

#### Lab Chronicle

Client: Ensolum Job ID: 890-2747-1
Project/Site: EVGSAU 3202-383 SDG: Lea County NM

Client Sample ID: FS07 Lab Sample ID: 890-2747-7

Date Collected: 08/11/22 10:40
Date Received: 08/11/22 15:27

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	32161	08/15/22 11:27	KS	EET MID
Soluble	Analysis	300.0		5			32247	08/17/22 23:09	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: EVGSAU 3202-383

Job ID: 890-2747-1

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	<b>Expiration Date</b>
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**

Client: Ensolum

Project/Site: EVGSAU 3202-383

Job ID: 890-2747-1

SDG: Lea County NM

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

#### **Protocol References:**

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

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

FS01

FS02

FS03

FS04

FS05

FS06

FS07

Client Sample ID

#### **Sample Summary**

Collected

08/10/22 12:00

08/11/22 10:00

08/11/22 10:10

08/11/22 10:30

08/10/22 14:00

08/10/22 14:30

08/11/22 10:40

Received

08/11/22 15:27

08/11/22 15:27

08/11/22 15:27

08/11/22 15:27

08/11/22 15:27

08/11/22 15:27

08/11/22 15:27

Depth

0.5

0.5

0.5

0.5

0.5

0.5

0.5

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Solid

Client: Ensolum

Lab Sample ID

890-2747-1

890-2747-2

890-2747-3

890-2747-4

890-2747-5

890-2747-6

890-2747-7

Project/Site: EVGSAU 3202-383

Job ID: 890-2747-1

SDG: Lea County NM

(1.02)

eurofins: **Environment Testing** 

Project Manager:

Company Name:

Ensolum Kalei Jennings

3122 National Parks HWY

Address: City, State ZIP:

Carlsbad, NM 88220 3122 National Parks HWY Company Name: Bill to: (if different)

> Kalei Jennings Ensolum

Carlsbad, NM 88220

City, State ZIP:

# Chain of Custody

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

0) 509-3334	AACIN CICCI INC.
794-1296	
) 988-3199	
	www.xenco.com Page of
	Work Order Comments
	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
	State of Project:
	Reporting: Level II ☐ Level III ☐ PST/JST ☐ TRRP ☐ Level IV☐
	Deliverables: EDD

Phone: 817	817-683-2503	300	-  -	Email:	Email: kjennings@ensolum.com.jadams@ensolum.com	s@enso	lum.c	om, jac	dams(	@ensolu	1 1	ANAL YSIS REQUEST	Delive	JEST		200	11 -	Preservative Codes	
Project Number:	03D2024044	24044		Routine	☑ Rush	0.70	Pres. Code									z	None: NO	DI Water: H <sub>2</sub> O	
Project Location:	Lea County, NM	nty, NM	0	Due Date:	3 Day TAT	TAT										0	Cool: Cool	MeOH: Me	
Sampler's Name:	Gilbert Moreno	Noreno	1	TAT starts the day received by	e day receiv	ed by					_	_	-	-	ŀ	I	HCL: HC	HNO <sub>3</sub> : HN	
CC#:				the lab, if received by 4:30pm	eived by 4:		rs									Ī	H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	NaOH: Na	
SAMPLE RECEIPT	Temp Blank:	nk: (Yes	No	Wet Ice:	(ves)	No	nete	.0)	_							I	H₃PO₄: HP		
Samples Received Intact:			Thermometer ID:	ID:	W.W.	مد		300								Z	NaHSO4: NABIS	SIS	
Cooler Custody Seals:	Yes No (	(VIA) Correction Factor:	ction Fa	ctor:	6.0-			PA:								z	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	Ö	
Sample Custody Seals:	No	N/A Temperature Reading:	erature l	Reading:	2.6			S (E	_		890-27	890-2747 Chain	of Cusiony	y	1	Zı	Zn Acetate+NaOH: Zn	aOH: Zn	
Total Containers:		Corre	cted Ter	Corrected Temperature:	2 0	1			015)	8021		_	_	_		Ž	aOH+Ascorb	NaOH+Ascorbic Acid: SAPC	
Sample Identification		Matrix Sam	Date Sampled	Time Sampled	Depth	Grab/ #	# of Cont	CHLOF	TPH (8	BTEX (							Sample	Sample Comments	D
FS01	S	08.10.22	0.22	12:00	0.5'	Comp		×	×	×									
FS02	S	08.11.22	1.22	10:00	0.5'	Comp	-	×	×	×									
FS03	S	08.11.22	1.22	10:10	0.5'	Comp	<b>→</b>	×	×	×							Incider	Incident Numbers	
FS04	S	08.11.22	1.22	10:30	0.5'	Comp	-	×	×	×							NAPP2	NAPP2207331663	
FS05	S	08.10.22	0.22	14:00	0.5'	Comp		×	×	×					-				
FS06	S	08.10.22	0.22	14:30	0.5'	Comp		×	×	×									
FS07	S	08.11.22	1.22	10:40	1.	Comp		×	×	×						-			
							1	H											
			オ	Jun	0	1													
		1				_	_	L	_	-									
Total 200.7 / 6010	200.8 / 6020	0:	8R	8RCRA 13PPM	- 11	Texas 11	Al Sb	Sb As I	Ba Be	ВС	Cd Ca Cr Co Cu Fe	Fe	b Mg M	Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	Se Ag S	iO <sub>2</sub> Na	Sr TI Sn L	UVZn	
Circle Method(s) and Metal(s) to be analyzed	letal(s) to be a	analyzed		TCLP / S	TCLP / SPLP 6010: 8RCRA	): 8RCF	SA Sb	b As	ВаЕ	P Cd	As Ba Be Cd Cr Co Cu Pb	Mn Mo		Ni Se Ag TI U	Hg:	1631 / 24	Hg: 1631 / 245.1 / 7470 / 7471	/7471	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from cilent company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the cilent if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$86.00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	nent and relinquisi be liable only for the charge of \$85.00 to	hment of sam the cost of sa will be applied	ples consti mples and to each p	itutes a valid j shall not assi roject and a c	purchase or ume any res harge of \$61	ter from cl ponsibility or each su	for any	npany to losses ubmitte	o Eurofi or expe d to Eur	ns Xenco, nses incu ofins Xeno	its affiliates and s rred by the client li co, but not analyze	ubcontracto I such losse d. These ter	rs. It assign s are due to ms will be e	is standard teri circumstances inforced unless	ms and conditi beyond the co previously nec	ions ontrol gotiated.			
Relinquished by: (Signature)	gnature)	2	eceived	Received by (Signature)	iture)			Date/Time	ime		Relinquished by: (Signa	by: (Signa	ature)	Rece	Received by: (Signature)	ignature)		Date/Time	

Revised Date: 08/25/2020 Rev. 2020 2

#### **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-2747-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 2747 List Number: 1 Creator: Clifton, Cloe

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

-

2

4

6

8

10

12

13

#### **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-2747-1 SDG Number: Lea County NM

Login Number: 2747 List Source: Eurofins Midland List Number: 2 List Creation: 08/15/22 08:36 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	

Page 28 of 28

<6mm (1/4").



APPENDIX E

**NMOCD Notifications** 

From: <u>Nobui, Jennifer, EMNRD</u>

To: <u>Kalei Jennings</u>

Cc: Bratcher, Mike, EMNRD; Harimon, Jocelyn, EMNRD; Hamlet, Robert, EMNRD

Subject: FW: [EXTERNAL] Maverick- Sampling Notification (Week of 08/08/22-08/12/22)

**Date:** Thursday, August 4, 2022 9:44:03 AM

Attachments: <u>image001.png</u>

image002.png image003.png image004.png

#### [ \*\*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@state.nm.us>

Sent: Thursday, August 4, 2022 9:21 AM

**To:** Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>

Subject: Fw: [EXTERNAL] Maverick- Sampling Notification (Week of 08/08/22-08/12/22)

**From:** Kalei Jennings < <u>kiennings@ensolum.com</u>>

Sent: Thursday, August 4, 2022 9:20 AM

To: Enviro, OCD, EMNRD < OCD. Enviro@state.nm.us>

**Cc:** Thomas Haigood < Thomas. Haigood@mavresources.com >; Cody Chesshire

<Cody.Chesshire@mavresources.com>

**Subject:** [EXTERNAL] Maverick- Sampling Notification (Week of 08/08/22-08/12/22)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

Maverick Natural Resources plans to complete final sampling activities at the following sites the week of August 8, 2022.

Monday:

Tuesday:

#### Wednesday:

• EVGSAU 3202-385 / NAPP2207331663

#### Thursday:

• Baish B Battery / NAPP2211143447

#### Friday:

• Baish B Battery / NAPP2211143447

Thank you,



From: <u>Nobui, Jennifer, EMNRD</u>

To: <u>Kalei Jennings</u>

Cc: Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD

Subject: FW: [EXTERNAL] Maverick- Sampling Notification (Week of 07/18/22-07/22/22)

**Date:** Thursday, July 14, 2022 11:06:18 AM

Attachments: <u>image001.png</u>

image002.png image003.png image004.png

### [ \*\*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@state.nm.us>

Sent: Thursday, July 14, 2022 10:39 AM

**To:** Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>

Subject: Fw: [EXTERNAL] Maverick- Sampling Notification (Week of 07/18/22-07/22/22)

**From:** Kalei Jennings < <u>kiennings@ensolum.com</u>>

Sent: Thursday, July 14, 2022 10:37 AM

To: Enviro, OCD, EMNRD < OCD. Enviro@state.nm.us>

**Subject:** [EXTERNAL] Maverick- Sampling Notification (Week of 07/18/22-07/22/22)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

Maverick Natural Resources plans to complete final sampling activities at the following sites the week of July 18, 2022.

Monday:

Tuesday:

Wednesday:

• MCA 83 / NAPP2205440227

### Thursday:

• EVGSAU 3202-385 / NAPP2207331663

### Friday:

• EVGSAU 3202-385 / NAPP2207331663

Thank you,



## Kalei Jennings Senior Scientist 817-683-2503 Ensolum, LLC

From: Beauvais, Charles R

To: Kalei Jennings; Kaushik, Rahul

Subject: FW: [EXTERNAL] Extension Request- EVGSAU 3202-385 (Incident Number NAPP2207331663)

**Date:** Tuesday, May 31, 2022 2:45:03 PM

Attachments: image001.png

### [ \*\*EXTERNAL EMAIL\*\*]

FYI

From: CFO\_Spill, BLM\_NM <BLM\_NM\_CFO\_Spill@blm.gov>

**Sent:** Tuesday, May 31, 2022 11:51 AM

**To:** Beauvais, Charles R <Charles.R.Beauvais@conocophillips.com>; EMNRD-OCD-District1spills <EMNRD-OCD-District1spills@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>

**Cc:** Esparza, Brittany <Brittany.Esparza@conocophillips.com>; Fejervary Morena, Gustavo A

<G.Fejervary@conocophillips.com>

Subject: Re: [EXTERNAL] Extension Request- EVGSAU 3202-385 (Incident Number NAPP2207331663)

**CAUTION**: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

The remediation plan or closure report that is due for this incident was set for **05/28/2022**. Your request for an extension to **August 26, 2022 (90 days)** is approved. Please keep the BLM updated if any problems prevent remediation for the site.

If you need anything further, please let me know.

**Crisha A. Morgan** | Certified - Environmental Protection Specialist | Program Officer|COR| Spills Coordinator| Orphaned Well POC Lead

Bureau of Land Management | Carlsbad Field Office

620 E. Greene Street Carlsbad, NM 88220

Cell 575-200-8648 | Office 575-234-5987 | camorgan@blm.gov

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**From:** Beauvais, Charles R < <a href="mailto:Charles.R.Beauvais@conocophillips.com">Charles.R.Beauvais@conocophillips.com</a>

**Sent:** Wednesday, May 25, 2022 2:15 PM

**To:** EMNRD-OCD-District1spills < <u>EMNRD-OCD-District1spills@state.nm.us</u>>; Hamlet, Robert, EMNRD < <u>Robert.Hamlet@state.nm.us</u>>; CFO\_Spill, BLM\_NM < <u>BLM\_NM\_CFO\_Spill@blm.gov</u>>

**Cc:** Esparza, Brittany < <u>Brittany.Esparza@conocophillips.com</u>>; Fejervary Morena, Gustavo A < <u>G.Fejervary@conocophillips.com</u>>

**Subject:** [EXTERNAL] Extension Request- EVGSAU 3202-385 (Incident Number NAPP2207331663)

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

To Whom It May Concern,

COP is requesting an extension for the current deadline of May 28, 2022 for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at EVGSAU 3202-385 (Incident Number NAPP2207331663). The release was discovered on February 27, 2022 and additional remediation activities are required. In order to complete remediation activities and prepare a remediation work plan or closure report, COP requests a 90-day extension of this deadline until August 26, 2022.

Respectfully,

# Charles R. Beauvais II

Senior Environmental Engineer | Environmental Operations | ConocoPhillips (M) 575-988-2043

Charles.R.Beauvais@conocophillips.com

Our work is never so urgent or important that we cannot take the time to do it safely and in an environmentally responsible manner.



From: Beauvais, Charles R
To: Kalei Jennings

Subject: FW: [EXTERNAL] Extension Request- EVGSAU 3202-385 (Incident Number NAPP2207331663)

**Date:** Thursday, May 26, 2022 11:48:22 AM

Attachments: image002.jpg

image003.png

### [ \*\*EXTERNAL EMAIL\*\*]

FYI

From: Hamlet, Robert, EMNRD < Robert. Hamlet@state.nm.us>

**Sent:** Thursday, May 26, 2022 11:10 AM

**To:** Beauvais, Charles R < Charles.R.Beauvais@conocophillips.com>

Cc: Esparza, Brittany < Brittany. Esparza@conocophillips.com >; Fejervary Morena, Gustavo A

<G.Fejervary@conocophillips.com>

Subject: RE: [EXTERNAL] Extension Request- EVGSAU 3202-385 (Incident Number NAPP2207331663)

**CAUTION**: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

# Please send all future extension requests to the OCD Enviro email box at OCD.Enviro@state.nm.us

RE: Incident #NAPP2207331663

### Charles,

Your request for an extension to **August 26th, 2022** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced Environmental Bureau

EMNRD - Oil Conservation Division 811 S. First Street | Artesia, NM 88210

575.909.0302 | robert.hamlet@state.nm.us

http://www.emnrd.state.nm.us/OCD/



**From:** Beauvais, Charles R < <a href="mailto:Charles.R.Beauvais@conocophillips.com">Charles R < <a href="mailto:Charles.R.Beauvais@conocophillips.com">Charles.R.Beauvais@conocophillips.com</a>

**Sent:** Wednesday, May 25, 2022 2:16 PM

**To:** EMNRD-OCD-District1spills < <u>EMNRD-OCD-District1spills@state.nm.us</u>>; Hamlet, Robert, EMNRD < <u>Robert.Hamlet@state.nm.us</u>>; CFO\_Spill, BLM\_NM < <u>BLM\_NM\_CFO\_Spill@blm.gov</u>>

**Cc:** Esparza, Brittany < <u>Brittany.Esparza@conocophillips.com</u>>; Fejervary Morena, Gustavo A < <u>G.Fejervary@conocophillips.com</u>>

**Subject:** [EXTERNAL] Extension Request- EVGSAU 3202-385 (Incident Number NAPP2207331663)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To Whom It May Concern,

COP is requesting an extension for the current deadline of May 28, 2022 for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at EVGSAU 3202-385 (Incident Number NAPP2207331663). The release was discovered on February 27, 2022 and additional remediation activities are required. In order to complete remediation activities and prepare a remediation work plan or closure report, COP requests a 90-day extension of this deadline until August 26, 2022.

Respectfully,

## Charles R. Beauvais II

Senior Environmental Engineer | Environmental Operations | ConocoPhillips (M) 575-988-2043

Charles.R.Beauvais@conocophillips.com

Our work is never so urgent or important that we cannot take the time to do it safely and in an environmentally responsible manner.



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

State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	NAPP2207331663
District RP	
Facility ID	
Application ID	

# **Release Notification**

# **Responsible Party**

Responsible Party OGRID							
Contact Name Contact				Contact T	Геlephone		
Contact email Inciden				Incident #	t # (assigned by OCD)		
Contact mail	ing address						
			Location	of Release S	Source		
Latitude			(NAD 83 in dec	Longitude imal degrees to 5 deci	: cimal places)		
Site Name				Site Type	·		
Date Release	Discovered			API# (if ap)	pplicable)		
Unit Letter	Section	Township	Range	Cour	unty		
Crude Oil		(s) Released (Select all	I that apply and attach	Volume of	Release  The justification for the volumes provided below)  Volume Recovered (bbls)		
Produced		Volume Released			Volume Recovered (bbls)		
	vv ater		ion of dissolved cl	hloride in the	Yes No		
Condensa	ite	Volume Release			Volume Recovered (bbls)		
Natural G	as	Volume Released	d (Mcf)		Volume Recovered (Mcf)		
Other (describe) Volume/Weight Released (provide units)			Released (provide	units)	Volume/Weight Recovered (provide units)		
Cause of Rela	ease						

Received by OCD: 8/26/2022 11558:26 AM State of New Mexico
Page 2 Oil Conservation Division

P	ag	e	Id	<b>G</b> eo	f	123

Incident ID	NAPP2207331663
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the	responsible party consider this a major release?
☐ Yes ☐ No		
If YES, was immediate no	otice given to the OCD? By whom?	To whom? When and by what means (phone, email, etc)?
	Initi	al Response
The responsible p	party must undertake the following actions im	nediately 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 heal	th and the environment.
Released materials ha	we been contained via the use of bern	ns or dikes, absorbent pads, or other containment devices.
☐ All free liquids and re	ecoverable materials have been remo-	ved and managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, ex	plain why:
Dar 10 15 20 9 D (4) NM	[AC the responsible party may comm	ence remediation immediately after discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If ren	nedial efforts have been successfully completed or if the release occurred AC), please attach all information needed for closure evaluation.
		to the best of my knowledge and understand that pursuant to OCD rules and
public health or the environr	nent. The acceptance of a C-141 report b	use notifications and perform corrective actions for releases which may endanger by the OCD does not relieve the operator of liability should their operations have
		e a threat to groundwater, surface water, human health or the environment. In ator of responsibility for compliance with any other federal, state, or local laws
Printed Name		Title:
Signature:	tan Japange	Date:
Cilian.		Telephone:
OCD Only	_	
Received by:Jocelyn	Harimon	Date: 03/14/2022
Received by		Date. 00/17/2022

Received by OCD: 8/26/2022 11:58:26 AM EVGSAU 3202-385  L48 Spill Volume Estimate Form  NAPP220733166317-of 123									
Received by OCL	: 8/26/2022	11:38:20 AM	EVGSAU 3202-385	4				14/11 1 22013	oaguviyeof 123
		Asset Area:	BUCKEYE						
	Release Disco	very Date & Time:	2-27-22 11:30AM						
		Release Type:	Oil Mixture						
Provide	any known detail	s about the event:	LEAK ON 2 7/8 STE	EL FLOW LINE BY SATELLITE 3 C	ON WELL 3202-385				
		-		Spill Calculation -	Subsurface Spill - Rectangle				
V	Vas the release of	on pad or off-pad?			On Pad - 10.5%; Off Pad - 15.12%	soil spilled-fluid satu	ration factor		
Has it rained at lea	ast a half inch in	the last 24 hours?		Yes, On Pa	ad - 8%; Off Pad - 13.57% soil spilled-	fluid saturation factor	; if No, use factors ab	ove.	
Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	35.0	6.0	1.50	15.12%	4.673	0.706	18.00%	0.127	0.579
Rectangle B	28.0	18.0	1.50	15.12%	11.214	1.696	18.00%	0.305	1.390
Rectangle C	20.0	15.0	2.00	15.12%	8.900	1.346	18.00%	0.242	1.103
Rectangle D	21.0	10.0	2.00	15.12%	6.230	0.942	18.00%	0.170	0.772
Rectangle E	10.0	6.0	2.00	15.12%	1.780	0.269	18.00%	0.048	0.221
Rectangle F	27.0	1.0	1.00	15.12%	0.401	0.061	18.00%	0.011	0.050
Rectangle G					0.000	0.000		0.000	0.000
Rectangle H					0.000	0.000		0.000	0.000
Rectangle I					0.000	0.000		0.000	0.000
Released to Imag	ing: 8/31/20	22 3:50:18 PM	1		0.000	0.000		0.000	0.000
					Total Volume Release:	5.019		0.903	4.116

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 89906

### CONDITIONS

Operator:	OGRID:
CONOCOPHILLIPS COMPANY	217817
600 W. Illinois Avenue	Action Number:
Midland, TX 79701	89906
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
jharimor	None	3/14/2022

te of New Mexico

Incident ID	NAPP2207331663
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?	50-100 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?	☐ Yes X 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 <b>not</b> on an exploration, development, production, or storage site?	Yes X No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
<ul> <li>         \infty Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well         \infty Field data     </li> </ul>	ls.
☐ Data table of soil contaminant concentration data	
Depth to water determination	
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release  Boring or excavation logs	
☐ Borning of 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.

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Incident ID	NAPP2207331663
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name: Bryce Wagoner	Title: HSE Specialist		
Signature:	Date: 08/31/2022		
email:bryce.wagoner@mavresouces.com	Telephone:928-241-1862		
OCD Only			
Received by:	Date:		

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Incident ID	NAPP2207331663
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 n	oust be included in the closure report.	
	AC	
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
☐ Laboratory analyses of final sampling (Note: appropriate ODC Distr	ict office must be notified 2 days prior to final sampling)	
Description of remediation activities		
I hereby certify that the information given above is true and complete to the and regulations all operators are required to report and/or file certain release may endanger public health or the environment. The acceptance of a C-14 should their operations have failed to adequately investigate and remediate human health or the environment. In addition, OCD acceptance of a C-14 compliance with any other federal, state, or local laws and/or regulations. restore, reclaim, and re-vegetate the impacted surface area to the condition accordance with 19.15.29.13 NMAC including notification to the OCD with the open condition of the OCD with the open conditions.	se notifications and perform corrective actions for releases which 41 report by the OCD does not relieve the operator of liability e contamination that pose a threat to groundwater, surface water, 1 report does not relieve the operator of responsibility for The responsible party acknowledges they must substantially as that existed prior to the release or their final land use in the reclamation and re-vegetation are complete.	
Printed Name:Bryce Wagoner Title	e: HSE Specialist	
Signature: Date:	08/31/2022	
email:bryce.wagoner@mavresources.com	Telephone:928-241-1862	
OCD Only		
Received by:	Date:	
Closure approval by the OCD does not relieve the responsible party of liab remediate contamination that poses a threat to groundwater, surface water, party of compliance with any other federal, state, or local laws and/or regu	human health, or the environment nor does not relieve the responsible	
Closure Approved by:	Date:08/31/2022	
Printed Name: Jennifer Nobui	Title: Environmental Specialist A	

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** 

COMMENTS

Action 138515

### **COMMENTS**

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	138515
	Action Type:
	[C-141] Release Corrective Action (C-141)

### COMMENTS

Created By		Comment Date
jharimon	C-141 closure pages missing	8/30/2022

District I
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CONDITIONS

Action 138515

### **CONDITIONS**

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	138515
	Action Type:
	[C-141] Release Corrective Action (C-141)

### CONDITIONS

Created By		Condition Date
jnobui	Closure Report Approved.	8/31/2022