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	nAPP2330651127
District RP	
Facility ID	
Application ID	

## **Release Notification**

## **Responsible Party**

			-	·	•				
Responsible P	arty XTC	) Energy		OGRID 5	5380				
Contact Name	Garrett Gr	reen		Contact Te	Contact Telephone 575-200-0729				
Contact email	garrett.gree	en@exxonmobil.c	om	Incident #	(assigned by OCD)				
			reet, Carlsbad, Nev	w Mexico, 88220					
			Location	of Release So	ource				
Latitude 32.18	8620			Longitude -	-103.67673				
Lutitude			(NAD 83 in dec	imal degrees to 5 decim	mal places)				
Site Name O	utrider CV	B		Site Type	Tank Battery				
	Date Release Discovered 10/21/2023 API# (if a								
Unit Letter	Section	Township	Range	Coun	nty				
J	28	24S	32E	Lea	a				
Surface Owner:	☐ State	ĭ Federal ☐ Ti	ribal	Volume of F	Release				
× Crude Oil	Materia	l(s) Released (Select al Volume Release	1 (1 1 1 )	calculations or specific	volume Recovered (bbls) 6.00				
Produced V	Votor	Volume Release	0.70		Volume Recovered (bbls) 6.00  Volume Recovered (bbls)				
1 Toduced v	v alci		tion of total dissolv	rad galida (TDC)	Volume Recovered (bbls)  Yes No				
			water >10,000 mg/		L res No				
Condensate	e	Volume Release	ed (bbls)		Volume Recovered (bbls)				
☐ Natural Ga	s	Volume Release	ed (Mcf)		Volume Recovered (Mcf)				
Other (desc	Other (describe) Volume/Weight Released (provide unit			units)	Volume/Weight Recovered (provide units)				
Cause of Relea	A broke contract	r en sight glass on h tor has been retain	eater treater 501 cated for remediation	nused fluids to relea purposes.	ease to pad. All free fluids were recovered. A third-party				

Received by OCD: 1/19/2024 2:31:29 PM Form C-141 State of New Mexico Page 2 Oil Conservation Division

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Incident ID	nAPP2330651127
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the respon	nsible party consider this a major release?			
release as defined by 19.15.29.7(A) NMAC?	N/A				
☐ Yes 🗷 No					
If YES, was immediate no N/A	otice given to the OCD? By whom? To wh	nom? When and by what means (phone, email, etc)?			
	Initial R	esponse			
The responsible j	party must undertake the following actions immediated	y unless they could create a safety hazard that would result in injury			
The source of the rele	ease has been stopped.				
	s been secured to protect human health and	the environment.			
Released materials ha	ave been contained via the use of berms or o	likes, absorbent pads, or other containment devices.			
All free liquids and recoverable materials have been removed and managed appropriately.					
If all the actions described	d above have <u>not</u> been undertaken, explain	why:			
NA					
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred blease attach all information needed for closure evaluation.			
		best of my knowledge and understand that pursuant to OCD rules and			
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release noti ment. The acceptance of a C-141 report by the C ate and remediate contamination that pose a thre	fications and perform corrective actions for releases which may endanger DCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws			
Printed Name: Garrett G	reen	Title: Environmental Coordinator			
Signature:	M Sun				
email: garrett.green@exx	conmobil.com	Telephone: 575-200-0729			
OCD Only					
Received by:		Date:			

Location:	Outrider		
Spill Date:	10/21/2023		
	Area 1		
Approximate A	rea =	3129.00	sq. ft.
Average Satura	tion (or depth) of spill =	0.50	inches
Average Porosi	ty Factor =	0.03	
	VOLUME OF LEAK		
Total Crude Oil	=	6.70	bbls
<b>Total Produced</b>	Water =	0.00	bbls
	TOTAL VOLUME OF LEAK		
Total Crude Oi	=	6.70	bbls
<b>Total Produced</b>	Water =	0.00	bbls
	TOTAL VOLUME RECOVERED		
Total Crude Oi	=	6.00	bbls
Total Produced	Water =	0.00	bbls



January 16, 2023

#### **New Mexico Oil Conservation Division**

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

Re: Closure Request

**Outrider CVB** 

Incident Number nAPP2330651127

Lea County, New Mexico

#### To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document site assessment, excavation, and soil sampling activities performed at the Outrider CVB (Site). The purpose of the Site assessment, excavation, and soil sampling activities was to address impacts to soil following a release of crude oil at the Site. Based on excavation activities and soil sample laboratory analytical results, XTO is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number nAPP2330651127.

#### SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit J, Section 28, Township 24 South, Range 32 East, in Lea County, New Mexico (32.18620°, -103.67673°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On October 21, 2023, a sight glass on a heater treater shattered, resulting in the release of approximately 6.7 barrels (bbls) of crude oil onto the surface of the well pad. A vacuum truck was immediately dispatched to recover free-standing fluids; approximately 6.0 bbls of released fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on November 2, 2023. The release was assigned Incident Number nAPP2330651127.

#### SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 5 of the Form C-141, Site Assessment/Characterization.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The nearest groundwater well is permitted by the New Mexico Office of the State Engineer (OSE file number C-4536) and is located approximately 0.41 miles south of the Site. The groundwater well was completed on June 10, 2021, and was drilled to a total depth of 500 feet bgs. The static groundwater level upon completion was 314 feet bgs. All wells used

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 3122 National Park Highway | Carlsbad, NM 88220 | ensolum.com

XTO Energy, Inc Closure Request Outrider CVB

for depth to water determination are depicted on Figure 1 and the Well Record and Log for groundwater well C-4536 is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a freshwater emergent wetland, located approximately 2,926 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area).

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

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

#### SITE ASSESSMENT ACTIVITIES

On November 8, 2023, Ensolum personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Two soil samples (SS01 and SS02) were collected within the observed soil stained area at a depth of 0.5 feet bgs, defined as the release extent. In addition, four delineation soil samples (SS03 through SS06) were collected around the release extent at a depth of 0.5 feet bgs to assess the lateral extent of the release. The delineation soil samples were field screened for chloride using Hach® chloride QuanTab® test strips. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation is included in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following constituents of concern (COC): 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. Soil samples delivered to the laboratory the same day they are collected may not have equilibrated to the 6 degrees Celcius required for shippment and long term storage, but are considered to have been received in acceptable condition by the laboratory.

Laboratory analytical results for delineation soil samples SS01 and SS02 indicated TPH concentrations exceeded the applicable Site Closure Criteria. Laboratory analytical results for delineation soil samples SS03 through SS06 indicated all COC concentrations were compliant with the applicable Site Closure Criteria. Based on visible staining within the release area and laboratory analytical results for SS01 and SS02, delineation and excavation activities appeared to be warranted.



XTO Energy, Inc Closure Request Outrider CVB

### **DELINEATION SOIL SAMPLING ACTIVITIES**

Between November 15, and December 11, 2023, Ensolum returned to the Site to oversee delineation and excavation activities. Two potholes (PH01 and PH02) were advanced in the vicinity of delineation soil samples SS01 and SS02, respectively, by use of heavy equipment to assess the vertical extent of the release. Two additional potholes (PH03 and PH04) were advanced around the release extent in the vicinity of SS05 and SS06, respectively. Discrete soil samples were collected from each pothole from depths ranging from 0.5 feet bgs to 5.5 feet bgs and field screened for volatile aromatic hydrocarbons (VOCs) utilizing a calibrated photoionization detector (PID) and chloride as described above. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C.

The delineation soil samples were handled and analyzed following the same procedures as described above. The pothole soil sample locations are depicted on Figure 2. Laboratory analytical results for delineation soil samples (PH01 through PH04) indicated all COC concentrations were compliant with the Site Closure Criteria and vertically delineated to the most stringent Table I Closure Criteria.

#### **EXCAVATION SOIL SAMPLING ACTIVITIES**

Between November 16, and December 11, 2023, impacted soil was excavated from the release area as indicated by delineation soil sample laboratory analytical results and field screenings to remove impacted and waste-containing soil. Excavation activities were performed utilizing a backhoe and transport vehicles. The entirety of the excavation occurred on the facility pad. To direct excavation activities, soil was screened for VOCs and chloride as described above.

Following removal of the impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. 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. Confirmation soil samples FS01 and FS02 were collected from the floor of the excavation at a depth of 5 feet bgs. Confirmation soil samples SW01 and SW02 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 5 feet bgs. The excavation confirmation soil samples were handled and analyzed following the same procedures as described above. The excavation extent and excavation confirmation soil sample locations are presented on Figure 3. Photographic documentation of the excavation is included in Appendix B.

Based on laboratory analytical results for sidewall soil sample SW02, additional excavation was completed to support lateral definition of the release to the strictest Table I Closure Criteria. Following the removal of waste-containing soil, confirmation floor soil sample FS03 and sidewall soil sample SW03 were collected following the same confirmation soil sampling procedures as described above. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix D.

The final excavation extent measured approximately 550 square feet. A total of approximately 100 cubic yards of impacted and waste-containing soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at R360 Landfill Disposal Facility in Hobbs, New Mexico. All waste-containing soil, exceeding the reclamation requirement and was accessible by heavy equipment, has been removed. An estimated 200 cubic yards of waste-containing soil remains on pad, immediately adjacent to or beneath active production equipment. The remaining soil is delineated to the strictest Table I Closure Criteria by SW03, FS03, SS05/PH03, SS06/PH04, SS07 through SS10 and will be reclaimed during pad abandonment or any major facility reconstruction.



XTO Energy, Inc. Closure Request Outrider CVB

The excavation was backfilled on January 12, 2024, with caliche material purchased locally and the area was recontoured to match pre-existing Site conditions. Photographic documentation of the backfill is included in Appendix B.

#### **CLOSURE REQUEST**

Site assessment and excavation activities were conducted at the Site to address the October 21, 2023, release of crude oil. Laboratory analytical results for excavation soil samples collected from the final excavation extent indicated all COC concentrations were compliant with the Closure Criteria. Based on laboratory analytical results, no further remediation is required at this time. Areas pending reclamation will be completed during pad abandonment or major facility reconstruction.

Excavation of soil has mitigated impacts at this Site. Depth to groundwater is confirmed to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number nAPP2330651127.

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

Sincerely, Ensolum, LLC

Benjamin J. Belill

**Project Geologist** 

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

ashley L. ager

Principal

Tommee Lambert, XTO

Bureau of Land Management

## Appendices:

CC:

Figure 1 Site Receptor Map

Garrett Green, XTO

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

Appendix B Photographic Log

Appendix C Lithologic / Soil Sampling Logs

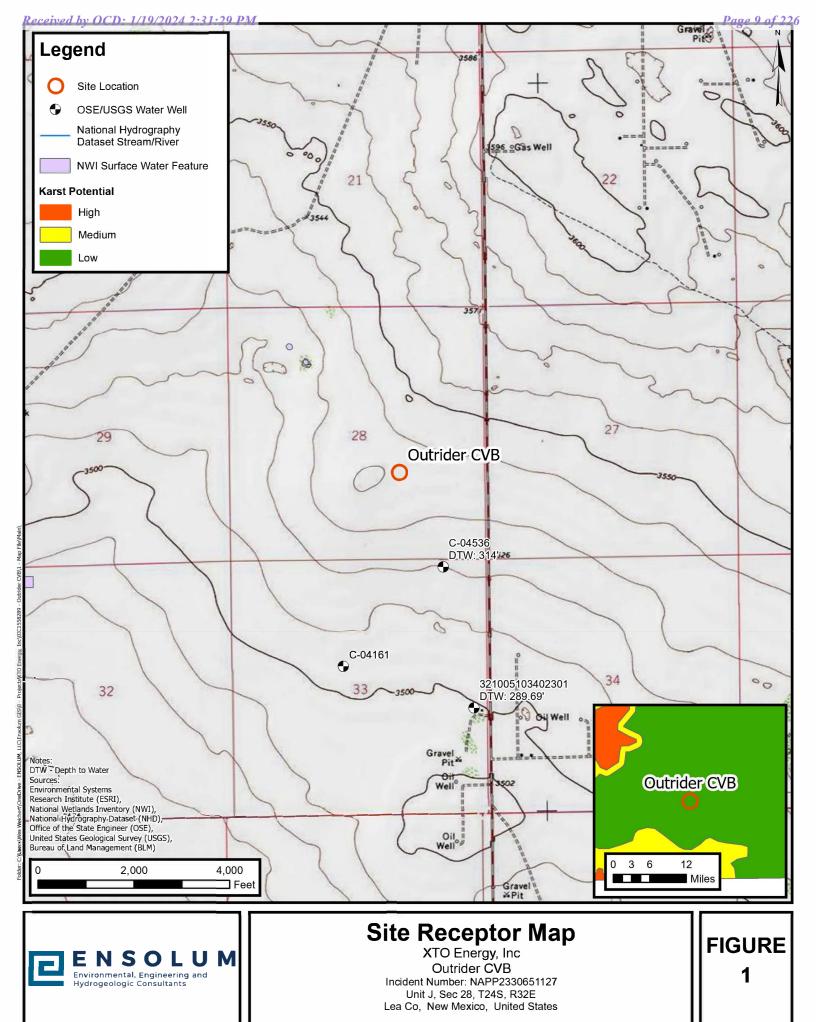
Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation

Appendix E NMOCD Notifications

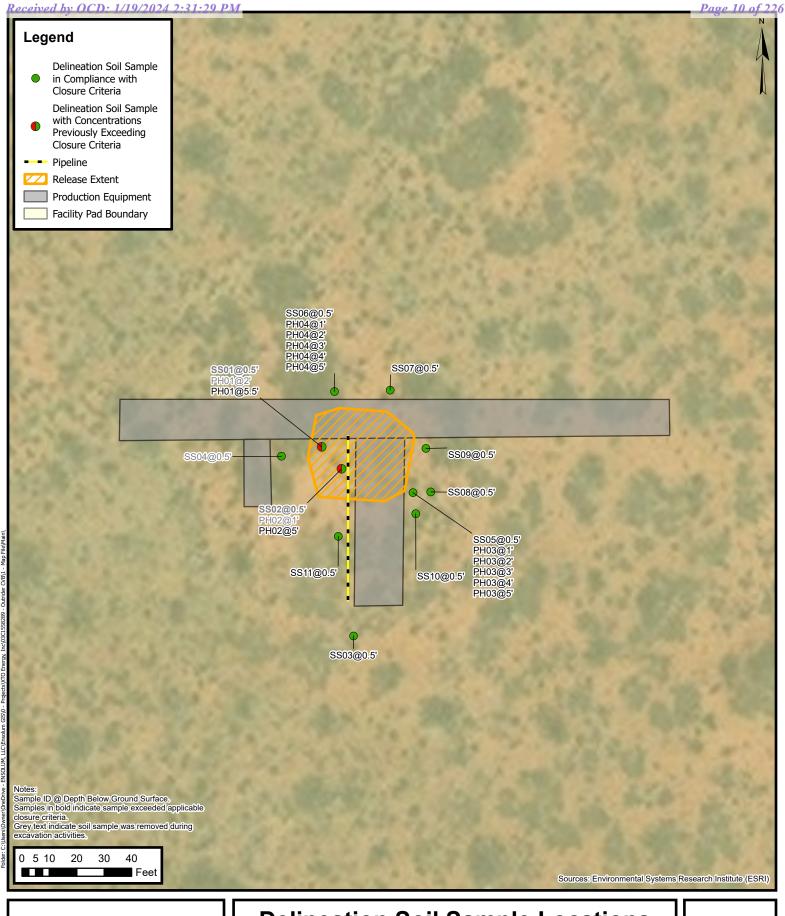




**FIGURES** 



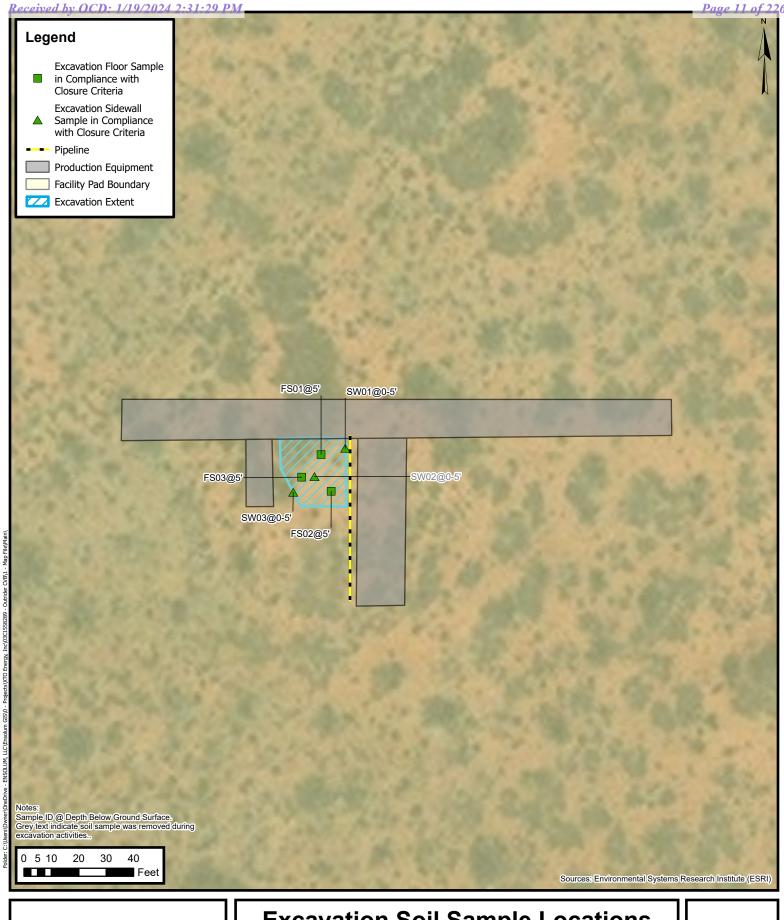
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# **Delineation Soil Sample Locations**

XTO Energy, Inc Outrider CVB Incident Number: NAPP2330651127 Unit J, Sec 28, T24S, R32E Lea County, New Mexico FIGURE 2





# **Excavation Soil Sample Locations**

XTO Energy, Inc Outrider CVB Incident Number: NAPP2330651127 Unit J, Sec 28, T24S, R32E Lea County, New Mexico FIGURE 3



**TABLES** 



## TABLE 1 **SOIL SAMPLE ANALYTICAL RESULTS Outrider CVB** XTO Energy, Inc Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I CI	osure Criteria (l	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Delir	neation Soil Sa	nples				
SS01	11/08/2023	0.5	0.00569	0.763	656	3,560	<del>150</del>	4,220	4,370	52.0
PH01	11/15/2023	2	<0.00198	<0.00396	< <del>50.1</del>	< <del>50.1</del>	< <del>50.1</del>	<del>&lt;50.1</del>	< <del>50.1</del>	7.71
PH01	11/15/2023	5.5	<0.00200	<0.00399	<50.4	<50.4	<50.4	<50.4	<50.4	10.2
SS02	11/08/2023	0.5	0.00206	21.6	<del>262</del>	2,460	120	2,720	<del>2,840</del>	250
PH02	11/15/2023	4	<0.00200	<0.00401	<50.1	67.3	<50.1	67.3	67.3	19.6
PH02	11/15/2023	5	<0.00202	<0.00403	<50.5	59.5	<50.5	59.5	59.5	35.5
SS03	11/08/2023	0.5	<0.00199	<0.00398	<49.6	64.7	<49.6	64.7	64.7	77.4
<del>\$\$04</del>	11/08/2023	0.5	<0.00199	<0.00398	<49.8	<del>117</del>	<49.8	<del>117</del>	117	48.1
SS05	11/08/2023	0.5	<0.00200	<0.00399	<50.4	114	<50.4	114	114	33.7
PH03	11/16/2023	1	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	8.84
PH03	11/16/2023	2	<0.00198	<0.00397	<50.5	<50.5	<50.5	<50.5	<50.5	<4.95
PH03	11/16/2023	3	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<5.02
PH03	11/16/2023	4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	13.0
PH03	11/16/2023	5	<0.00202	<0.00403	<49.6	<49.6	<49.6	<49.6	<49.6	6.06
SS06	11/08/2023	0.5	<0.00202	<0.00403	<50.5	56.9	<50.5	56.9	56.9	100
PH04	11/16/2023	1	<0.00200	<0.00401	<50.3	<50.3	<50.3	<50.3	<50.3	23.8
PH04	11/16/2023	2	<0.00201	<0.00402	<50.1	<50.1	<50.1	<50.1	<50.1	<4.96
PH04	11/16/2023	3	<0.00200	<0.00401	<50.4	<50.4	<50.4	<50.4	<50.4	<5.02
PH04	11/16/2023	4	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	<50.5	<5.01
PH04	11/16/2023	5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	5.06
SS07	12/11/2023	0.5	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	127
SS08	12/11/2023	0.5	<0.00198	<0.00396	<50.5	<50.5	<50.5	<50.5	<50.5	69.0
SS09	12/11/2023	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	74.5
SS10	12/11/2023	0.5	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	84.3
SS11	12/11/2023	0.5	<0.00200	<0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	84.8
				Confi	rmation Soil Sa	ımples				
FS01	11/16/2023	5	<0.00199	<0.00398	<50.0	160	<50.0	160	160	11.6
FS02	11/16/2023	5	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	10.5

Ensolum

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Received by OCD: 1/19/2024 2:31:29 PM



# TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Outrider CVB XTO Energy, Inc Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I CI	osure Criteria (I	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
FS03	12/11/2023	5	<0.00201	<0.00402	<50.1	<50.1	<50.1	<50.1	<50.1	<4.97
SW01	11/16/2023	0 - 5	<0.00201	0.0530	83.2	598	57.8	681	739	25.7
SW02	11/16/2023	0-5	<0.00200	0.177	76.8	<del>619</del>	65.7	696	<del>762</del>	28.0
SW03	12/11/2023	0 - 5	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	7.17

#### Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

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

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria

GRO: Gasoline Range Organics
DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities

Ensolum 2 of 2



**APPENDIX A** 

Referenced Well Records

PAGE 1 OF 2

WELL TAG ID NO.

OSE DTI JUL 9 2021 PM 1:52



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DITUUN 21 2021 PM10:14

	OSE POD NO	. (WELL NO.	)	<u> </u>	WELL TAG ID NO	<del>),                                     </del>	•	OSE FILE NO	rs).					
NO	ì	POT			20E37			C-4536						
OCATI	WELL OWNE BASIN PR		ES RANCHES LLC	)			•	PHONE (OPTI	ONAL)					
WELL I	WELL OWNE 3300 N A S		ADDRESS BLDG 1, STE 220					· ·			ZIP 79705			
GENERAL AND WELL LOCATION	WELL LOCATIO (FROM GP	S)	DE FITUDE RGITUDE	32 103	MINUTES 10 40	SECON 50. 25.	8 <sub>N</sub>		* ACCURACY REQUIRED: ONE TENTH OF A SECOND  * DATUM REQUIRED: WGS 84					
1. GEN	DESCRIPTIO	ON RELATIN	G WELL LOCATION TO	STREET ADDR	RESS AND COMMO	N LANDMA	ARKS – PLS	S (SECTION, TO	)WNSHJIP, RANGE) WI	IERE AVAILABLE				
	LICENSE NO		NAME OF LICENSED	DRILLER					NAME OF WELL DR	ILLING COMPANY				
	WD1				Bryce Wallace	!			1	Drillers Corporation				
	DRILLING ST 06/09		DRILLING ENDED 06/10/21	DEPTH OF CO	MPLETED WELL (1)	FT)		LE DEPTH (FT) 500						
z	COMPLETED	WELL IS:	ARTESIAN	STATIC WATER LEVEL IN COMPLETED WELL (FT ARTESIAN DRY HOLE SHALLOW (UNCONFINED) 314					ELL (FT)					
TIO	DRILLING FI	LUID:	✓ AIR	MUD MUD	ADDITT	VES - SPEC	IFY:		<u> </u>					
RMA	DRILLING M	ETHOD:	ROTARY	Наммен	CABLE	TOOL	ОТНЕ	R – SPECIFY:						
NFO	DEPTH (	(feet bgl)	BORE HOLE	CASING	MATERIAL AN	D/OR		· cp.ic	CASING	CASING WALL	1			
CASING INFORMATION	FROM	ТО	DIAM (inches)		GRADE each casing string sections of screen		CON	ASING NECTION TYPE ling diameter)	INSIDE DIAM.	THICKNESS (inches)	SLOT SIZE (inches)			
& C/	0	20	12 3/4		STEEL	7		N/A	8.28	.337				
	0	300	7 7/8		SDR17 PVC		SI	PLINE	4.3	SDR17				
2. DRILLING	300	500	7 7/8		SDR17 PVC		SI	PLINE	4.3	SDR17	.032			
2.														
, L	DEPTH (	(feet bgl)	BORE HOLE DIAM. (inches)	1	ST ANNULAR S VEL PACK SIZI				AMOUNT (cubic feet)	METH-				
ERI,	0	20	12 3/4		<del> </del>	EMENT			10	TOP	FILL			
IAT	0	20	7 7/8		CE	EMENT		· .	6	TOP	FILL			
ANNULAR MATERIAL	300	500	7 7/8		8/16 SII	LICA SAN	ND		46	TOP	FILL			
3. ANN														
FOR	OSE INTERI	NAL USE	1			<del></del>		WR-2	0 WELL RECORD	& LOG (Version 06/	30/17)			

## OSE DII JUL 9 2021 PM1:53

05E DII JUN 21 2021 PM10:14

. 1	DEPTH (fe	eet bgl)		COLOR AND	D TYPE OF MA	TERIAL EX	ICOLD!	TEDED	T			ESTIMATED
	FROM	то	THICKNESS (feet)	INCLUDE WATE	D TYPE OF MA R-BEARING C. plemental sheet	AVITIES O	R FRAC	TURE ZONE	es	WAT BEAR (YES	ING?	YIELD FOR WATER- BEARING ZONES (gpm)
	0	3	3		RED	SAND				Y	✓ N	
	3	12	9		CAL	ICHE				Y	√ N	
	12	180	168		RED	CLAY				Y	✓ N	
	180	235	415		TAN SAN	NDSTONE				Y	✓ N	
	235	480	245	TAN	SANDSTONE &	& CLAY ST	RINGE	RS		✓ Y	N	4.00
<u> </u>	480	500	20	REI	CLAY WITH	SAND STR	INGERS	3		Y	<b>√</b> N	
<u> </u>										Y	N	
0										Y	N	
8										Y	N	
); 										Y	Ŋ	
Š 🗀					· · · · · · · · · · · · · · · · · · ·					Y	N	
4. HYDROGEOLOGIC LOG OF WELL										Y	N	
Š –										Y	N	
H										Y	N	
4										Y	N	
										Y	N	
										Y	N	
						······································				Y	N	
										Y	N	
							•			Y	N	
						-				Y	N	
M	ETHOD US	SED TO ES	TIMATE YIELD	OF WATER-BEARING	STRATA:				1	L ESTIN		·
	PUMP	<b>✓</b> Al	R LIFT	BAILER OT	HER - SPECIF	Y:			WEL	L YIELD	(gpm):	4.00
z W	VELL TEST	TEST	RESULTS - ATTA T TIME, END TIME	ACH A COPY OF DAT ME, AND A TABLE SH	A COLLECTED OWING DISCH	DURING Y	WELL T D DRAV	ESTING, INC	CLUDIN ER THE	G DISC	HARGE IG PERIO	METHOD, DD.
TEST; RIG SUPERVISION  M  M	IISCELLAN	EOUS INF	ORMATION:									
	RINT NAM	E(S) OF DE	RILL RIG SUPER	VISOR(S) THAT PROV	VIDED ONSITE	SUPERVIS	SION OI	WELL CON	ISTRUC	TION O	THER TI	HAN LICENSEE
vi TH	HE UNDER ORRECT R	ECORD OI	THE ABOVE D	IES THAT, TO THE BE ESCRIBED HOLE ANI 0 DAYS AFTER COME	D THAT HE OR PLETION OF W	SHE WILL	FILE T			WITH 1	THE STA	
Yi TH	HE UNDER ORRECT R	ECORD OI RMIT HOI	THE ABOVE D LDER WITHIN 2	ESCRIBED HOLE ANI O DAYS AFTER COME BI	D THAT HE OR PLETION OF W ryce Wallace	SHE WILL	FILE T			WITH 1	THE STA	
SIGNATURE S.	HE UNDER ORRECT R	ECORD OI RMIT HOI	THE ABOVE D LDER WITHIN 2	ESCRIBED HOLE ANI	D THAT HE OR PLETION OF W ryce Wallace	SHE WILL	FILE T			WITH 1	THE STA	
6. SIGNATURE THE CO AT THE	HE UNDER ORRECT R ND THE P	ECORD OI	THE ABOVE D LDER WITHIN 2	ESCRIBED HOLE ANI O DAYS AFTER COME BI	D THAT HE OR PLETION OF W ryce Wallace	SHE WILL	FILE T	HIS WELL R	LECORE	06/16	THE STA 5/2021 DATE	



**APPENDIX B** 

Photographic Log



## **Photographic Log**

XTO Energy, INC.
Outrider CVB
Incident Number NAPP2330651127





View: North

Description: Site assessment, release extent area.



Photograph: 2 Date: 11/15/2023 Description: Site assessment, release extent area.

View: East



Photograph: 3 Date: 12/11/2023

Description: Final excavation extent

View: Northwest



Photograph: 4 Date: 12/11/2023

Description: Final excavation extent

View: Southeast



## **Photographic Log**

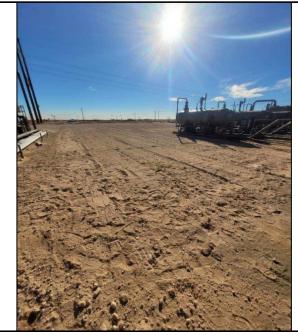
XTO Energy, INC.
Outrider CVB
Incident Number NAPP2330651127



Photograph: 5 Date: 1/12/2024

Description: Excavation backfilled.

View: Northeast



Photograph: 6 Date: 1/12/2024

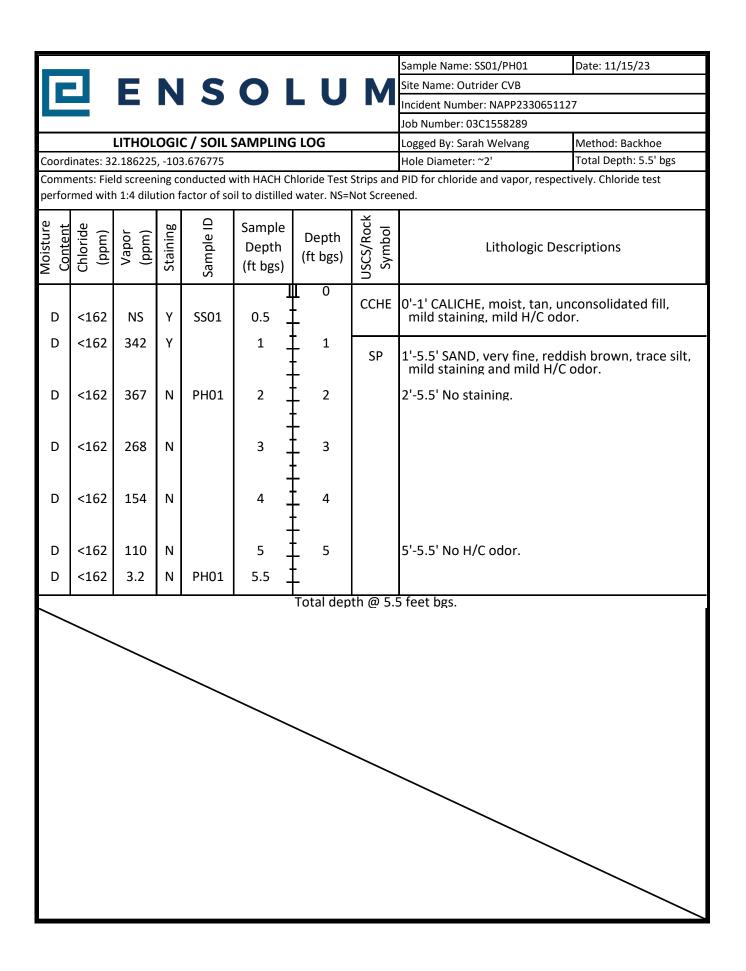
Description: Excavation backfilled.

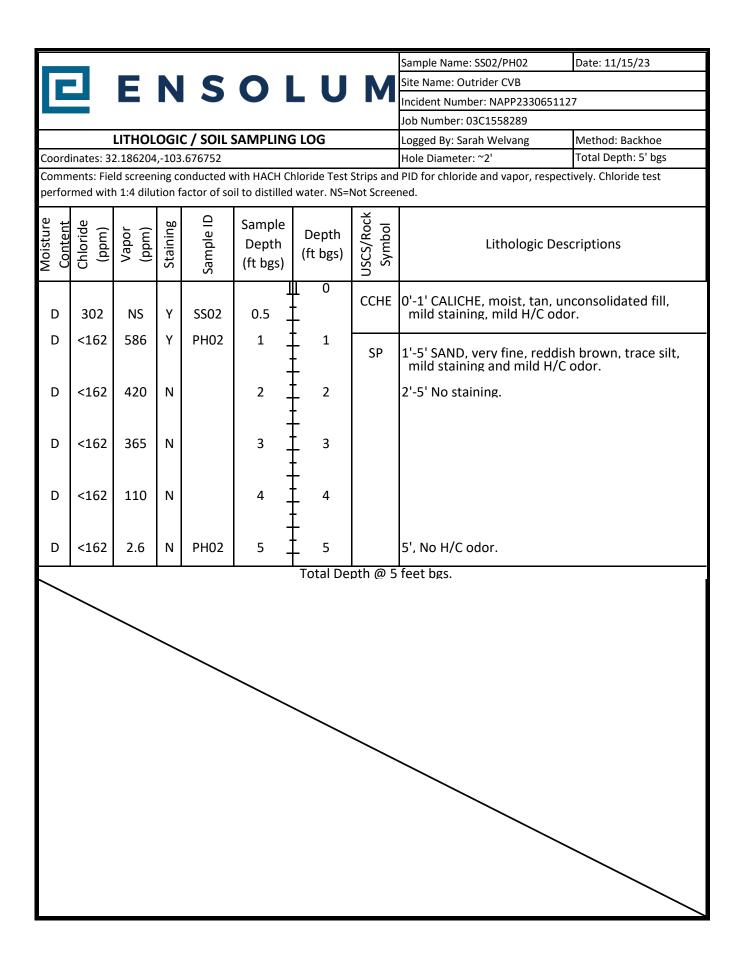
View: South

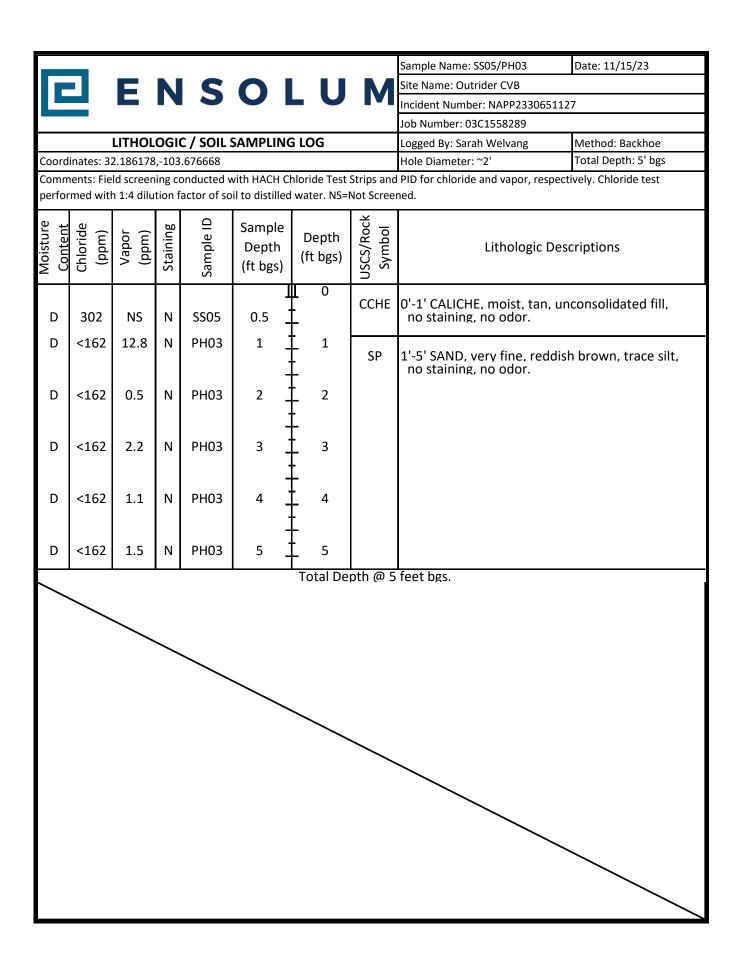


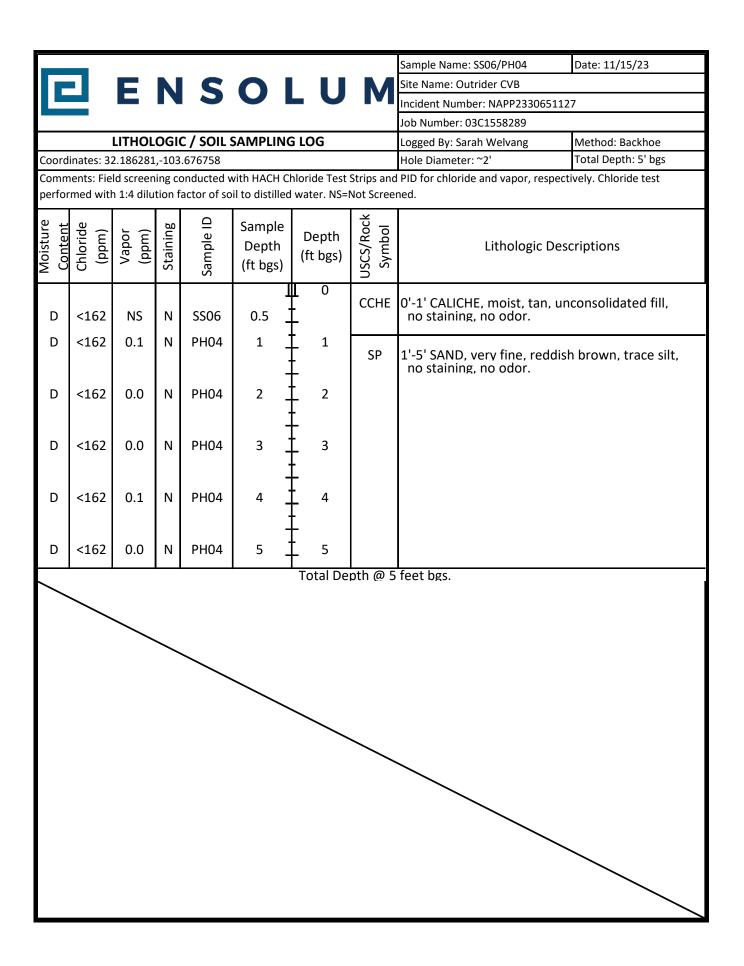
APPENDIX C

Lithologic Soil Sampling Logs











APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Ben Belill

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 11/22/2023 11:19:36 AM

## **JOB DESCRIPTION**

Outrider CVB 03C1558289

## **JOB NUMBER**

890-5607-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

## **Eurofins Carlsbad**

## **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

## **Authorization**

Generated 11/22/2023 11:19:36 AM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies Page 2 of 23

Client: Ensolum
Project/Site: Outrider CVB
Laboratory Job ID: 890-5607-1
SDG: 03C1558289

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## **Definitions/Glossary**

Job ID: 890-5607-1 Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

## **Qualifiers**

## **GC VOA**

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

#### GC Semi VOA

Qualifier Description
MS and/or MSD recovery exceeds control limits.
Surrogate recovery exceeds control limits, low biased.
Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## **Glossary**

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

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit

**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 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 **Quality Control** QC

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

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

Released to Imaging: 3/26/2024 3:19:52 PM

**TNTC** Too Numerous To Count

**Eurofins Carlsbad** 

#### Case Narrative

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5607-1

SDG: 03C1558289

Job ID: 890-5607-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-5607-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 11/9/2023 2:33 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 6.4°C

#### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil iar: SS 01 (890-5607-1) and SS 02 (890-5607-2).

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS 01 (890-5607-1) and SS 02 (890-5607-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (CCV 880-67531/2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS 02 (890-5607-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC Semi VOA

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: (880-35343-A-1-F), (880-35343-A-1-G) MS) and (880-35343-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: SS 01 (890-5607-1) and SS 02 (890-5607-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-67028 and analytical batch 880-67152. The associated laboratory control sample (LCS) met acceptance criteria.

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: 890-5607-1 SDG: 03C1558289

Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: SS 01

Lab Sample ID: 890-5607-1

Date Collected: 11/08/23 10:15

Date Received: 11/09/23 14:33

Matrix: Solid

Sample Depth: 0.5'

Client: Ensolum

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.00569		0.00199	mg/Kg		11/15/23 11:41	11/16/23 20:04	
Toluene	0.0720		0.00199	mg/Kg		11/15/23 11:41	11/16/23 20:04	
Ethylbenzene	0.0242		0.00199	mg/Kg		11/15/23 11:41	11/16/23 20:04	
m-Xylene & p-Xylene	0.413		0.00398	mg/Kg		11/15/23 11:41	11/16/23 20:04	
o-Xylene	0.248		0.00199	mg/Kg		11/15/23 11:41	11/16/23 20:04	
Xylenes, Total	0.661		0.00398	mg/Kg		11/15/23 11:41	11/16/23 20:04	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	80		70 - 130			11/15/23 11:41	11/16/23 20:04	
1,4-Difluorobenzene (Surr)	5	S1-	70 - 130			11/15/23 11:41	11/16/23 20:04	
Method: TAL SOP Total BTEX -	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	0.763		0.00398	mg/Kg			11/16/23 20:04	
Method: SW846 8015 NM - Dies	sel Range Organ	ics (DRO) (	GC)					
Analyte	Result	ics (DRO) ( Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
			•	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 11/16/23 17:44	
Analyte	Result 4370 esel Range Orga	Qualifier nics (DRO)	RL 50.4	mg/Kg		Prepared		
Analyte Total TPH Method: SW846 8015B NM - Di Analyte	Result 4370 esel Range Orga	Qualifier	RL	mg/Kg	<u>D</u>	Prepared Prepared		
Analyte Total TPH Method: SW846 8015B NM - Di	Result 4370 esel Range Orga	Qualifier nics (DRO)	RL 50.4 (GC)	mg/Kg			11/16/23 17:44	
Analyte Total TPH Method: SW846 8015B NM - Di Analyte Gasoline Range Organics	Result 4370 esel Range Orga Result	Qualifier nics (DRO)	RL	mg/Kg		Prepared	11/16/23 17:44  Analyzed	
Analyte Total TPH  Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 4370 esel Range Orga Result 656	Qualifier nics (DRO)	RL 50.4  (GC)  RL 50.4	mg/Kg  Unit  mg/Kg		Prepared 11/15/23 09:52	11/16/23 17:44  Analyzed  11/16/23 17:44	
Analyte Total TPH  Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	Result 4370 esel Range Orga Result 656 3560	Qualifier nics (DRO)	RL 50.4  (GC)  RL 50.4  50.4	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/15/23 09:52 11/15/23 09:52	Analyzed 11/16/23 17:44 11/16/23 17:44	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 4370  esel Range Orga	Qualifier  unics (DRO) Qualifier	RL 50.4 (GC) RL 50.4 50.4	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/15/23 09:52 11/15/23 09:52 11/15/23 09:52	Analyzed 11/16/23 17:44  11/16/23 17:44  11/16/23 17:44  11/16/23 17:44	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   4370	Qualifier  unics (DRO) Qualifier	RL 50.4  (GC)  RL 50.4  50.4  50.4  Limits	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/15/23 09:52 11/15/23 09:52 11/15/23 09:52 Prepared	Analyzed 11/16/23 17:44  Analyzed 11/16/23 17:44  11/16/23 17:44  Analyzed	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   4370     4	Qualifier  Qualifier  Qualifier  S1-	RL 50.4 (GC) RL 50.4 50.4 50.4 Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/15/23 09:52 11/15/23 09:52 11/15/23 09:52  Prepared 11/15/23 09:52	Analyzed 11/16/23 17:44  Analyzed 11/16/23 17:44  11/16/23 17:44  Analyzed 11/16/23 17:44	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result   4370	Qualifier  Qualifier  Qualifier  S1-	RL 50.4 (GC) RL 50.4 50.4 50.4 Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/15/23 09:52 11/15/23 09:52 11/15/23 09:52  Prepared 11/15/23 09:52	Analyzed 11/16/23 17:44  Analyzed 11/16/23 17:44  11/16/23 17:44  Analyzed 11/16/23 17:44	Dil Fa

Client Sample ID: SS 02

Date Collected: 11/08/23 10:20

Lab Sample ID: 890-5607-2

Matrix: Solid

Date Collected: 11/08/23 10:20 Date Received: 11/09/23 14:33

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00206		0.00200	mg/Kg		11/15/23 11:41	11/16/23 20:25	1
Toluene	0.0982		0.00200	mg/Kg		11/15/23 11:41	11/16/23 20:25	1
Ethylbenzene	0.115		0.00200	mg/Kg		11/15/23 11:41	11/16/23 20:25	1
m-Xylene & p-Xylene	16.6		0.402	mg/Kg		11/20/23 09:23	11/21/23 14:59	100
o-Xylene	4.80		0.201	mg/Kg		11/20/23 09:23	11/21/23 14:59	100
Xylenes, Total	21.4		0.402	mg/Kg		11/20/23 09:23	11/21/23 14:59	100

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2

3

+

7

9

10

12

4 4

Matrix: Solid

Lab Sample ID: 890-5607-2

11/14/23 15:27

## **Client Sample Results**

Client: Ensolum Job ID: 890-5607-1 Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: SS 02

Date Collected: 11/08/23 10:20 Date Received: 11/09/23 14:33

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/15/23 11:41	11/16/23 20:25	1
1,4-Difluorobenzene (Surr)	9	S1-	70 - 130			11/15/23 11:41	11/16/23 20:25	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	21.6		0.402	mg/Kg			11/21/23 14:59	1
Method: SW846 8015 NM - Dies	sel Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2840		49.7	mg/Kg			11/16/23 18:05	1
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015B NM - Di	esel Range Orga	nics (DRO)	(GC)					
Gasoline Range Organics GRO)-C6-C10	262		49.7	mg/Kg		11/15/23 09:52	11/16/23 18:05	1
Diesel Range Organics (Over	2460		49.7	mg/Kg		11/15/23 09:52	11/16/23 18:05	1
C10-C28)								
310-020)	120		49.7	mg/Kg		11/15/23 09:52	11/16/23 18:05	1
Oll Range Organics (Over	120							
· · · · · · · · · · · · · · · · · · ·	120							
Oll Range Organics (Over	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)		Qualifier S1-	Limits 70 - 130			Prepared 11/15/23 09:52	Analyzed 11/16/23 18:05	Dil Fac

5.02

250

mg/Kg

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## **Surrogate Summary**

Client: Ensolum Job ID: 890-5607-1
Project/Site: Outrider CVB SDG: 03C1558289

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)	
880-35797-A-81-B MS	Matrix Spike	103	98	
880-35797-A-81-C MSD	Matrix Spike Duplicate	90	108	
390-5607-1	SS 01	80	5 S1-	
890-5607-2	SS 02	87	9 S1-	
890-5658-A-1-M MS	Matrix Spike	116	112	
890-5658-A-1-N MSD	Matrix Spike Duplicate	111	113	
LCS 880-67061/1-A	Lab Control Sample	99	116	
LCS 880-67374/1-B	Lab Control Sample	122	117	
LCSD 880-67061/2-A	Lab Control Sample Dup	105	110	
LCSD 880-67374/2-B	Lab Control Sample Dup	115	118	
MB 880-67061/5-A	Method Blank	117	154 S1+	
MB 880-67094/5-A	Method Blank	114	119	
MB 880-67374/5-B	Method Blank	72	99	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
80-35343-A-1-G MS	Matrix Spike	2 S1-	0.2 S1-	
80-35343-A-1-H MSD	Matrix Spike Duplicate	2 S1-	0.2 S1-	
90-5607-1	SS 01	96	59 S1-	
90-5607-2	SS 02	65 S1-	40 S1-	
CS 880-67028/2-A	Lab Control Sample	97	112	
CSD 880-67028/3-A	Lab Control Sample Dup	92	105	
IB 880-67028/1-A	Method Blank	109	124	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

**Eurofins Carlsbad** 

Client: Ensolum Job ID: 890-5607-1 Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67061/5-A

**Matrix: Solid** Analysis Batch: 67021 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67061

	МВ	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/15/23 11:41	11/16/23 12:38	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prep	oared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	11/15/2	23 11:41	11/16/23 12:38	1
1,4-Difluorobenzene (Surr)	154	S1+	70 - 130	11/15/2	23 11:41	11/16/23 12:38	1

Lab Sample ID: LCS 880-67061/1-A

Matrix: Solid

Analysis Batch: 67021

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 67061

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1235		mg/Kg		124	70 - 130	
Toluene	0.100	0.08522		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.08726		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	0.200	0.1904		mg/Kg		95	70 - 130	
o-Xylene	0.100	0.09465		mg/Kg		95	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: LCSD 880-67061/2-A

**Matrix: Solid** 

Analysis Batch: 67021

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	<b>Control San</b>	nple Dup
--	------------	-------------	--------------------	----------

Prep Type: Total/NA

Prep Batch: 67061

RPD Spike LCSD LCSD %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1191 mg/Kg 119 70 - 130 35 Toluene 0.100 0.08593 mg/Kg 86 70 - 130 35 Ethylbenzene 0.100 0.08452 mg/Kg 85 70 - 130 3 35 0.200 0.1801 m-Xylene & p-Xylene mg/Kg 90 70 - 130 35 0.100 0.09651 70 - 130 o-Xylene mg/Kg 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	105		70 - 130		
1.4-Difluorobenzene (Surr)	110		70 - 130		

Lab Sample ID: 880-35797-A-81-B MS

**Matrix: Solid** 

Analysis Batch: 67021

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

Prep Batch: 67061

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0996	0.08388		mg/Kg	_	84	70 - 130	
Toluene	< 0.00199	U F1	0.0996	0.06167	F1	mg/Kg		62	70 - 130	

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Client: Ensolum Project/Site: Outrider CVB

Job ID: 890-5607-1

SDG: 03C1558289

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

**Matrix: Solid** 

Analysis Batch: 67021

Lab Sample ID: 880-35797-A-81-B MS Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 67061

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00199 U F1 0.0996 0.06371 F1 64 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00398 UF1 0.199 0.1444 mg/Kg 72 70 - 130 0.0996 0.07765 o-Xylene <0.00199 UF1 mg/Kg 78 70 - 130

MS MS

Surrogate	%Recovery (	Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 67061

**Matrix: Solid** 

Lab Sample ID: 880-35797-A-81-C MSD

**Analysis Batch: 67021** 

-	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	0.08417		mg/Kg		84	70 - 130	0	35
Toluene	<0.00199	U F1	0.100	0.06025	F1	mg/Kg		60	70 - 130	2	35
Ethylbenzene	<0.00199	U F1	0.100	0.05329	F1	mg/Kg		53	70 - 130	18	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1270	F1	mg/Kg		63	70 - 130	13	35
o-Xylene	< 0.00199	U F1	0.100	0.06890	F1	mg/Kg		69	70 - 130	12	35

MSD MSD

Surrogate	%Recovery Qu	ıalifier Limits
4-Bromofluorobenzene (Surr)	90	70 - 130
1,4-Difluorobenzene (Surr)	108	70 - 130

Lab Sample ID: MB 880-67094/5-A

**Matrix: Solid** 

Analysis Batch: 67021

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67094

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/15/23 13:29	11/16/23 00:55	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114	70 - 130	11/15/23 13:29	11/16/23 00:55	1
1.4-Difluorobenzene (Surr)	119	70 - 130	11/15/23 13:29	11/16/23 00:55	1

Lab Sample ID: MB 880-67374/5-B

**Matrix: Solid** 

Analysis Batch: 67531

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67374

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/20/23 09:23	11/21/23 12:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/20/23 09:23	11/21/23 12:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/20/23 09:23	11/21/23 12:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/20/23 09:23	11/21/23 12:34	1

**Eurofins Carlsbad** 

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5607-1

SDG: 03C1558289

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

Lab Sample ID: MB 880-67374/5-B

**Matrix: Solid** 

Analysis Batch: 67531

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 67374

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg	_	11/20/23 09:23	11/21/23 12:34	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/20/23 09:23	11/21/23 12:34	1

MR MR

MR MR

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72	70 - 130	11/20/23 09:23	11/21/23 12:34	1
1,4-Difluorobenzene (Surr)	99	70 - 130	11/20/23 09:23	11/21/23 12:34	1

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCS 880-67374/1-B **Matrix: Solid** 

Lab Sample ID: LCSD 880-67374/2-B

Matrix: Solid

**Analysis Batch: 67531** 

Prep Type: Total/NA

Prep Batch: 67374

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1166		mg/Kg		117	70 - 130	
Toluene	0.100	0.1091		mg/Kg		109	70 - 130	
Ethylbenzene	0.100	0.1115		mg/Kg		111	70 - 130	
m-Xylene & p-Xylene	0.200	0.2372		mg/Kg		119	70 - 130	
o-Xylene	0.100	0.1130		mg/Kg		113	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	122	70 - 130
1,4-Difluorobenzene (Surr)	117	70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 67531							Prep	Batch:	67374
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1102		mg/Kg		110	70 - 130	6	35
Toluene	0.100	0.1037		mg/Kg		104	70 - 130	5	35
Ethylbenzene	0.100	0.1015		mg/Kg		101	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2175		mg/Kg		109	70 - 130	9	35
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130	8	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	115	70 - 130
1.4-Difluorobenzene (Surr)	118	70 - 130

Lab Sample ID: 890-5658-A-1-M MS

**Matrix: Solid** Analysis Batch: 67531

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

Prep Batch: 67374

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0990	0.1082		mg/Kg		109	70 - 130	
Toluene	<0.00199	U	0.0990	0.08862		mg/Kg		90	70 - 130	
Ethylbenzene	<0.00199	U	0.0990	0.08971		mg/Kg		91	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1806		mg/Kg		91	70 - 130	
o-Xylene	<0.00199	U	0.0990	0.09339		mg/Kg		94	70 - 130	

Client: Ensolum Job ID: 890-5607-1 Project/Site: Outrider CVB SDG: 03C1558289

70 - 130

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

112

Lab Sample ID: 890-5658-A-1-M MS

**Matrix: Solid** 

Analysis Batch: 67531

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 67374

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 116 70 - 130

Lab Sample ID: 890-5658-A-1-N MSD

**Matrix: Solid** 

1,4-Difluorobenzene (Surr)

Analysis Batch: 67531

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 67374

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit <0.00199 U 0.100 0.1083 108 70 - 130 0 35 Benzene mg/Kg Toluene <0.00199 U 0.100 0.08077 mg/Kg 80 70 - 130 35 <0.00199 U 0.100 0.08206 mg/Kg 82 70 - 130 35 Ethylbenzene 9 m-Xylene & p-Xylene <0.00398 U 0.201 0.1645 mg/Kg 82 70 - 130 9 35 o-Xylene <0.00199 U 0.100 0.08990 mg/Kg 90 70 - 130 35

MSD MSD

%Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 111 70 - 130 1,4-Difluorobenzene (Surr) 113 70 - 130

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

Lab Sample ID: MB 880-67028/1-A

**Matrix: Solid** 

**Analysis Batch: 67152** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67028

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/15/23 09:52	11/16/23 07:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/15/23 09:52	11/16/23 07:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/15/23 09:52	11/16/23 07:31	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	11/15/23 09:52	11/16/23 07:31	1
o-Terphenyl	124		70 - 130	11/15/23 09:52	11/16/23 07:31	1

Lab Sample ID: LCS 880-67028/2-A

**Matrix: Solid** 

**Analysis Batch: 67152** 

Client Sample ID: Lab Control Sample

	Spike	LCS LCS	5			%Rec	
Analyte	Added	Result Qua	alifier Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1059	mg/Kg		106	70 - 130	
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	924.3	mg/Kg		92	70 - 130	
040,000)							

C10-C28)

	LUS	LUS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	112		70 - 130

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Prep Type: Total/NA

Prep Batch: 67028

Client: Ensolum Job ID: 890-5607-1 Project/Site: Outrider CVB SDG: 03C1558289

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

Lab Sample ID: LCSD 880-67028/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 67152 Prep Batch: 67028

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	1090		mg/Kg		109	70 - 130	3	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	952.9		mg/Kg		95	70 - 130	3	20	
040,000)										

C10-C28) LCSD LCSD

	2005	2002	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: 880-35343-A-1-G MS Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA **Analysis Batch: 67152** Prep Batch: 67028

	Sample	Sample	Spike	IVIS	IVIS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<50.0	U F1	1010	<50.5	U F1	mg/Kg		2	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<50.0	U F1	1010	<50.5	U F1	mg/Kg		0.3	70 - 130	
C10-C28)										

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	2	S1-	70 - 130
o-Terphenyl	0.2	S1-	70 - 130

Lab Sample ID: 880-35343-A-1-H MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 67152 Prep Batch: 67028

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	1010	<50.5	U F1	mg/Kg		2	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1010	<50.5	U F1	mg/Kg		-0.2	70 - 130	12	20

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	2	S1-	70 - 130
o-Terphenyl	0.2	S1-	70 - 130

### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66795/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 66958** 

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/14/23 13:29	1

## QC Sample Results

Client: Ensolum Job ID: 890-5607-1 Project/Site: Outrider CVB

SDG: 03C1558289

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-66795/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 66958

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 230.4 mg/Kg 92 90 - 110

Lab Sample ID: LCSD 880-66795/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 66958** 

Spike LCSD LCSD %Rec RPD Added Limit Analyte Result Qualifier Unit D %Rec Limits RPD Chloride 250 231.5 mg/Kg 93 90 - 110 0

Lab Sample ID: 890-5606-A-40-B MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 66958

MS MS %Rec Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit Limits Chloride 39.7 253 267.7 90 - 110 mg/Kg

Lab Sample ID: 890-5606-A-40-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 66958** 

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Qualifier Unit %Rec RPD Limit Result Limits Chloride 39.7 253 267.6 90 90 - 110 20 mg/Kg

Client: Ensolum Job ID: 890-5607-1 Project/Site: Outrider CVB SDG: 03C1558289

### **GC VOA**

### Analysis Batch: 67021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-1	SS 01	Total/NA	Solid	8021B	67061
890-5607-2	SS 02	Total/NA	Solid	8021B	67061
MB 880-67061/5-A	Method Blank	Total/NA	Solid	8021B	67061
MB 880-67094/5-A	Method Blank	Total/NA	Solid	8021B	67094
LCS 880-67061/1-A	Lab Control Sample	Total/NA	Solid	8021B	67061
LCSD 880-67061/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67061
880-35797-A-81-B MS	Matrix Spike	Total/NA	Solid	8021B	67061
880-35797-A-81-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67061

### Prep Batch: 67061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-1	SS 01	Total/NA	Solid	5035	<u> </u>
890-5607-2	SS 02	Total/NA	Solid	5035	
MB 880-67061/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67061/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67061/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-35797-A-81-B MS	Matrix Spike	Total/NA	Solid	5035	
880-35797-A-81-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

### Prep Batch: 67094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67094/5-A	Method Blank	Total/NA	Solid	5035	

### Analysis Batch: 67298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-1	SS 01	Total/NA	Solid	Total BTEX	
890-5607-2	SS 02	Total/NA	Solid	Total BTEX	

### Prep Batch: 67374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-2	SS 02	Total/NA	Solid	5035	
MB 880-67374/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-67374/1-B	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67374/2-B	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5658-A-1-M MS	Matrix Spike	Total/NA	Solid	5035	
890-5658-A-1-N MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

### Analysis Batch: 67531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-2	SS 02	Total/NA	Solid	8021B	67374
MB 880-67374/5-B	Method Blank	Total/NA	Solid	8021B	67374
LCS 880-67374/1-B	Lab Control Sample	Total/NA	Solid	8021B	67374
LCSD 880-67374/2-B	Lab Control Sample Dup	Total/NA	Solid	8021B	67374
890-5658-A-1-M MS	Matrix Spike	Total/NA	Solid	8021B	67374
890-5658-A-1-N MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67374

### **GC Semi VOA**

### Prep Batch: 67028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-1	SS 01	Total/NA	Solid	8015NM Prep	

Client: Ensolum

Job ID: 890-5607-1 Project/Site: Outrider CVB SDG: 03C1558289

GC Semi VOA (Continued)

## Prep Batch: 67028 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-2	SS 02	Total/NA	Solid	8015NM Prep	
MB 880-67028/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67028/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-35343-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-35343-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 67152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-1	SS 01	Total/NA	Solid	8015B NM	67028
890-5607-2	SS 02	Total/NA	Solid	8015B NM	67028
MB 880-67028/1-A	Method Blank	Total/NA	Solid	8015B NM	67028
LCS 880-67028/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67028
LCSD 880-67028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67028
880-35343-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	67028
880-35343-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67028

### Analysis Batch: 67311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-1	SS 01	Total/NA	Solid	8015 NM	
890-5607-2	SS 02	Total/NA	Solid	8015 NM	

## HPLC/IC

### Leach Batch: 66795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-1	SS 01	Soluble	Solid	DI Leach	
890-5607-2	SS 02	Soluble	Solid	DI Leach	
MB 880-66795/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66795/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66795/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5606-A-40-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5606-A-40-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### **Analysis Batch: 66958**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5607-1	SS 01	Soluble	Solid	300.0	66795
890-5607-2	SS 02	Soluble	Solid	300.0	66795
MB 880-66795/1-A	Method Blank	Soluble	Solid	300.0	66795
LCS 880-66795/2-A	Lab Control Sample	Soluble	Solid	300.0	66795
LCSD 880-66795/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66795
890-5606-A-40-B MS	Matrix Spike	Soluble	Solid	300.0	66795
890-5606-A-40-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	66795

Client: Ensolum Job ID: 890-5607-1 Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: SS 01 Lab Sample ID: 890-5607-1 Date Collected: 11/08/23 10:15

**Matrix: Solid** 

Date Received: 11/09/23 14:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	67061	11/15/23 11:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67021	11/16/23 20:04	SM	EET MID
Total/NA	Analysis	Total BTEX		1			67298	11/16/23 20:04	AJ	EET MID
Total/NA	Analysis	8015 NM		1			67311	11/16/23 17:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	67028	11/15/23 09:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67152	11/16/23 17:44	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	66795	11/13/23 08:10	СН	EET MID
Soluble	Analysis	300.0		1			66958	11/14/23 15:22	CH	EET MID

Lab Sample ID: 890-5607-2 Client Sample ID: SS 02

Date Collected: 11/08/23 10:20 **Matrix: Solid** 

Date Received: 11/09/23 14:33

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 67061 Total/NA Prep 5.01 g 5 mL 11/15/23 11:41 MNR EET MID Total/NA 8021B 11/16/23 20:25 **EET MID** Analysis 1 5 mL 5 mL 67021 SM 5035 Total/NA Prep 4.97 g 5 mL 67374 11/20/23 09:23 EL EET MID 8021B Total/NA Analysis 100 5 mL 5 mL 67531 11/21/23 14:59 MNR EET MID Total/NA Analysis Total BTEX 1 67298 11/21/23 14:59 ΑJ **EET MID** 8015 NM Total/NA Analysis 1 67311 11/16/23 18:05 SM **EET MID** Total/NA 8015NM Prep 10.06 g 11/15/23 09:52 EET MID Prep 10 mL 67028 TKC Total/NA Analysis 8015B NM 1 uL 1 uL 67152 11/16/23 18:05 SM **EET MID** Soluble DI Leach 4.98 g 66795 11/13/23 08:10 СН **EET MID** Leach 50 mL Soluble Analysis 300.0 66958 11/14/23 15:27 СН **EET MID** 

**Laboratory References:** 

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

## **Accreditation/Certification Summary**

Client: Ensolum
Project/Site: Outrider CVB
Job ID: 890-5607-1
SDG: 03C1558289

**Laboratory: Eurofins Midland** 

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
,	are included in this report, bu	it the laboratory is not certi	fied by the governing authority. This lis	t may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

1

## **Method Summary**

Client: Ensolum Job ID: 890-5607-1 Project/Site: Outrider CVB

SDG: 03C1558289

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	EPA	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

EPA = US Environmental Protection Agency

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: Outrider CVB

Job ID: 890-5607-1

SDG: 03C1558289

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	ı
890-5607-1	SS 01	Solid	11/08/23 10:15	11/09/23 14:33	0.
890-5607-2	SS 02	Solid	11/08/23 10:20	11/09/23 14:33	0.5'

Environment Testing
Xenco

Chain of Custody

13

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-333 EL-Paso, TX (915) 585-3443; Hubbodk, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

( (210) 509-3334	14) 902-0300	Ę
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Andrew Green's Angreen Species		

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the coor chall of custody	890-5607 Chain of Clistodic			

## **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-5607-1

SDG Number: 03C1558289

Login Number: 5607 List Source: Eurofins Carlsbad

List Number: 1

Creator: Bruns, Shannon

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

## **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-5607-1 SDG Number: 03C1558289

Login Number: 5607 **List Source: Eurofins Midland** List Number: 2 List Creation: 11/13/23 09:24 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Ben Belill

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 11/27/2023 1:47:04 PM Revision 1

# **JOB DESCRIPTION**

Outrider CVB 03C1558289

## **JOB NUMBER**

890-5608-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

# **Eurofins Carlsbad**

## **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

## **Authorization**

Generated 11/27/2023 1:47:04 PM Revision 1

Authorized for release by Jessica Kramer, Project Manager <u>Jessica.Kramer@et.eurofinsus.com</u> (432)704-5440 2

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Client: Ensolum
Project/Site: Outrider CVB
Laboratory Job ID: 890-5608-1
SDG: 03C1558289

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Eurofins Carlsbad 11/27/2023 (Rev. 1) **Definitions/Glossary** 

Client: Ensolum Job ID: 890-5608-1 Project/Site: Outrider CVB

SDG: 03C1558289

### **Qualifiers**

**GC VOA** 

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

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

**HPLC/IC** 

Qualifier **Qualifier Description** U Indicates the analyte was analyzed for but not detected.

**Glossary** 

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

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

%R Percent Recovery Contains Free Liquid **CFL** 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) Limit of Detection (DoD/DOE) LOD LOQ Limit of Quantitation (DoD/DOE)

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

MDI 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: Outrider CVB

Job ID: 890-5608-1

SDG: 03C1558289

Job ID: 890-5608-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-5608-1

#### REVISION

The report being provided is a revision of the original report sent on 11/17/2023. The report (revision 1) is being revised due to Per client email, requesting TPH re run on samples 1-3.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 11/9/2023 2:33 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 6.4°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SS 03 (890-5608-1), SS 04 (890-5608-2), SS 05 (890-5608-3) and SS 06 (890-5608-4).

#### **GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67061 and analytical batch 880-67021 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-67061 and analytical batch 880-67021 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-35797-A-81-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC Semi VOA

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: (880-35343-A-1-F), (880-35343-A-1-G) MS) and (880-35343-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-67028 and analytical batch 880-67152. The associated laboratory control sample (LCS) met acceptance criteria.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-67473 and analytical batch 880-67601 was outside the upper control limits.

### **Case Narrative**

Client: Ensolum

Project/Site: Outrider CVB SDG: 03C1558289

Job ID: 890-5608-1

## Job ID: 890-5608-1 (Continued)

### **Laboratory: Eurofins Carlsbad (Continued)**

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: (880-35980-A-38-C), (880-35980-A-38-D) MS) and (880-35980-A-38-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: SS 03 (890-5608-1) and SS 05 (890-5608-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67473 and analytical batch 880-67601 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

#### HPLC/IC

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

Client: Ensolum Job ID: 890-5608-1
Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: SS 03 Lab Sample ID: 890-5608-1

Date Collected: 11/08/23 11:35 Matrix: Solid
Date Received: 11/09/23 14:33

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/15/23 11:41	11/16/23 14:08	1
Toluene	< 0.00199	U	0.00199	mg/Kg		11/15/23 11:41	11/16/23 14:08	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/15/23 11:41	11/16/23 14:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/15/23 11:41	11/16/23 14:08	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/15/23 11:41	11/16/23 14:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/15/23 11:41	11/16/23 14:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/15/23 11:41	11/16/23 14:08	1
1,4-Difluorobenzene (Surr)	112		70 - 130			11/15/23 11:41	11/16/23 14:08	1
Method: TAL SOP Total BTEX	. Total BTE	X Calculat	ion					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg		-	11/16/23 14:08	1
: Method: SW846 8015 NM - Di	esel Range (	Organics (	DRO) (GC)					
	_	•	, , ,	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Di Analyte Total TPH	_	Organics ( Qualifier	DRO) (GC) RL 49.6	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 11/23/23 04:08	
Analyte Total TPH	Result 64.7	Qualifier	<b>RL</b> 49.6		<u>D</u>	Prepared		
Analyte	Result 64.7 Diesel Range	Qualifier  Organics	<b>RL</b> 49.6		<u>D</u>	Prepared		
Analyte Total TPH	Result 64.7 Diesel Range Result	Qualifier  Organics Qualifier	RL 49.6 (DRO) (GC) RL		<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: SW846 8015B NM - E	Result 64.7 Diesel Range	Qualifier  Organics Qualifier	RL 49.6 (DRO) (GC)	mg/Kg	— = 	<u> </u>	11/23/23 04:08	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - E Analyte Gasoline Range Organics	Result 64.7 Diesel Range Result	Qualifier  Organics Qualifier	RL 49.6 (DRO) (GC) RL	mg/Kg Unit	— = 	Prepared	11/23/23 04:08 Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - E Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 64.7 Diesel Range Result <49.6	Qualifier  Organics Qualifier  U	RL 49.6  (DRO) (GC) RL 49.6	mg/Kg  Unit mg/Kg	— = 	Prepared 11/20/23 15:52 11/20/23 15:52	11/23/23 04:08  Analyzed 11/23/23 04:08	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - December 2015  Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 64.7  Diesel Range Result <49.6  64.7	Qualifier  Organics Qualifier  U	RL 49.6  (DRO) (GC) RL 49.6  49.6	mg/Kg  Unit mg/Kg  mg/Kg	— = 	Prepared 11/20/23 15:52 11/20/23 15:52	11/23/23 04:08  Analyzed 11/23/23 04:08  11/23/23 04:08	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - December 19 PM - December 20 P	Result 64.7  Diesel Range Result <49.6  64.7  <49.6	Qualifier  Organics Qualifier  U  Qualifier	RL 49.6  (DRO) (GC) RL 49.6  49.6  49.6  49.6	mg/Kg  Unit mg/Kg  mg/Kg	— = 	Prepared 11/20/23 15:52 11/20/23 15:52 11/20/23 15:52	11/23/23 04:08  Analyzed 11/23/23 04:08  11/23/23 04:08  11/23/23 04:08	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - E Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result 64.7  Diesel Range Result <49.6  64.7  <49.6  %Recovery	Qualifier  Organics Qualifier  U  Qualifier	RL 49.6  (DRO) (GC) RL 49.6  49.6  49.6  Limits	mg/Kg  Unit mg/Kg  mg/Kg	— = 	Prepared 11/20/23 15:52 11/20/23 15:52 11/20/23 15:52 Prepared 11/20/23 15:52	11/23/23 04:08  Analyzed 11/23/23 04:08  11/23/23 04:08  11/23/23 04:08  Analyzed	Dil Face 1 1 1 1 Dil Face 1
Analyte Total TPH  Method: SW846 8015B NM - E Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result 64.7  Diesel Range Result <49.6  64.7  <49.6  %Recovery  147 124	Qualifier  Organics Qualifier  U  Qualifier  S1+	RL 49.6 (DRO) (GC) RL 49.6 49.6 49.6 Limits 70 - 130 70 - 130	mg/Kg  Unit mg/Kg  mg/Kg	— = 	Prepared 11/20/23 15:52 11/20/23 15:52 11/20/23 15:52 Prepared 11/20/23 15:52	11/23/23 04:08  Analyzed 11/23/23 04:08  11/23/23 04:08  11/23/23 04:08  Analyzed 11/23/23 04:08	1 Dil Face 1 1 1 1 Dil Face 1
Analyte Total TPH  Method: SW846 8015B NM - E Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result   64.7	Qualifier  Organics Qualifier  U  Qualifier  S1+	RL 49.6 (DRO) (GC) RL 49.6 49.6 49.6 Limits 70 - 130 70 - 130	mg/Kg  Unit mg/Kg  mg/Kg	— = 	Prepared 11/20/23 15:52 11/20/23 15:52 11/20/23 15:52 Prepared 11/20/23 15:52	11/23/23 04:08  Analyzed 11/23/23 04:08  11/23/23 04:08  11/23/23 04:08  Analyzed 11/23/23 04:08	Dil Fac  1  Dil Fac  1  Dil Fac  1  Dil Fac

Client Sample ID: SS 04

Date Collected: 11/08/23 11:40

Lab Sample ID: 890-5608-2

Matrix: Solid

Date Received: 11/09/23 14:33

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/15/23 11:41	11/16/23 14:29	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/15/23 11:41	11/16/23 14:29	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/15/23 11:41	11/16/23 14:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/15/23 11:41	11/16/23 14:29	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/15/23 11:41	11/16/23 14:29	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/15/23 11:41	11/16/23 14:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			11/15/23 11:41	11/16/23 14:29	1

Client: Ensolum Job ID: 890-5608-1

Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: SS 04 Lab Sample ID: 890-5608-2 Date Collected: 11/08/23 11:40 Matrix: Solid Date Received: 11/09/23 14:33

Sample Depth: 0.5

Surrogate	%Recovery Qualit	ier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114	70 - 130	11/15/23 11:41	11/16/23 14:29	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/16/23 14:29	1

Method: SW846 8015 NM	- Diosal Rango	Organice (DRO) (GC)
MICHIGA. SYVOTO OUTS INN	- Diesei Kange	Organica (DIXO) (OO)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	117		49.8	mg/Kg			11/23/23 04:29	1

		( - : : - ) ( )					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8 U	49.8	mg/Kg		11/20/23 15:52	11/23/23 04:29	1
Diesel Range Organics (Over C10-C28)	117	49.8	mg/Kg		11/20/23 15:52	11/23/23 04:29	1
Oll Range Organics (Over C28-C36)	<49.8 U	49.8	mg/Kg		11/20/23 15:52	11/23/23 04:29	1
	0/5 0 !!!	,					

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120	70 - 130	11/20/23 15:52	11/23/23 04:29	1
o-Terphenyl	104	70 - 130	11/20/23 15:52	11/23/23 04:29	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.1	5.03	mg/Kg			11/14/23 15:50	1

Lab Sample ID: 890-5608-3 **Client Sample ID: SS 05 Matrix: Solid** 

Date Collected: 11/08/23 11:45 Date Received: 11/09/23 14:33

Sample Depth: 0.5

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

Welliou. Syvo40 002 ID - Vo	Jame Organic	Compount	us (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 14:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 14:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 14:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/15/23 11:41	11/16/23 14:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 14:49	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/15/23 11:41	11/16/23 14:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			11/15/23 11:41	11/16/23 14:49	1
1 4-Difluorobenzene (Surr)	127		70 - 130			11/15/23 11:41	11/16/23 14:49	1

ı	Mothod:	TAI	SUD.	Total	RTEY	- Total	RTEY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/16/23 14:49	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	114	50.4	mg/Kg			11/23/23 04:51	1

Client: Ensolum Job ID: 890-5608-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: SS 05** 

Lab Sample ID: 890-5608-3

**Matrix: Solid** 

Date Collected: 11/08/23 11:45 Date Received: 11/09/23 14:33

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		11/20/23 15:52	11/23/23 04:51	1
Diesel Range Organics (Over C10-C28)	114		50.4	mg/Kg		11/20/23 15:52	11/23/23 04:51	1
Oll Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/20/23 15:52	11/23/23 04:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130			11/20/23 15:52	11/23/23 04:51	1
o-Terphenyl	116		70 - 130			11/20/23 15:52	11/23/23 04:51	1
Method: EPA 300.0 - Anions,	Ion Chromat	tography -	Soluble					
Method. LFA 300.0 - Allions,					_	Duamanad	A a l a al	Dil Faa
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

**Client Sample ID: SS 06** Lab Sample ID: 890-5608-4 **Matrix: Solid** 

Date Collected: 11/08/23 12:10

Date Received: 11/09/23 14:33

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/15/23 11:41	11/16/23 15:09	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/15/23 11:41	11/16/23 15:09	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/15/23 11:41	11/16/23 15:09	1
m-Xylene & p-Xylene	< 0.00403	U	0.00403	mg/Kg		11/15/23 11:41	11/16/23 15:09	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/15/23 11:41	11/16/23 15:09	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/15/23 11:41	11/16/23 15:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			11/15/23 11:41	11/16/23 15:09	1
1,4-Difluorobenzene (Surr)	120		70 - 130			11/15/23 11:41	11/16/23 15:09	1
Method: TAL SOP Total BTEX	- Total BTE	X Calculat	ion					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/16/23 15:09	1
Method: SW846 8015 NM - Die	esel Range	Organics (	DRO) (GC)					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.9		50.5	mg/Kg			11/16/23 14:14	1
Method: SW846 8015B NM - D	iesel Range	Organics	(DRO) (GC)					
Method: SW846 8015B NM - D Analyte		Organics Qualifier	(DRO) (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
		Qualifier		Unit mg/Kg	D	Prepared 11/15/23 09:52	Analyzed 11/16/23 14:14	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier	RL		_ <u>D</u>			
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.5	Qualifier U	RL 50.5	mg/Kg	<u> </u>	11/15/23 09:52	11/16/23 14:14	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.5 56.9	Qualifier U	50.5 50.5	mg/Kg	<u>D</u>	11/15/23 09:52 11/15/23 09:52	11/16/23 14:14 11/16/23 14:14	1
Analyte Gasoline Range Organics	Result <50.5 56.9 <50.5	Qualifier U	50.5 50.5 50.5	mg/Kg	<u>D</u>	11/15/23 09:52 11/15/23 09:52 11/15/23 09:52	11/16/23 14:14 11/16/23 14:14 11/16/23 14:14	1 1

## **Client Sample Results**

Client: Ensolum Job ID: 890-5608-1 Project/Site: Outrider CVB SDG: 03C1558289

Lab Sample ID: 890-5608-4 **Client Sample ID: SS 06** 

Date Collected: 11/08/23 12:10 **Matrix: Solid** 

Date Received: 11/09/23 14:33

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	100	4.97	mg/Kg			11/14/23 16:01	1			

## **Surrogate Summary**

Client: Ensolum Job ID: 890-5608-1 Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

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

			Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-35797-A-81-B MS	Matrix Spike	103	98	
880-35797-A-81-C MSD	Matrix Spike Duplicate	90	108	
890-5608-1	SS 03	87	112	
890-5608-2	SS 04	94	114	
890-5608-3	SS 05	93	127	
890-5608-4	SS 06	96	120	
LCS 880-67061/1-A	Lab Control Sample	99	116	
LCSD 880-67061/2-A	Lab Control Sample Dup	105	110	
MB 880-67061/5-A	Method Blank	117	154 S1+	
MB 880-67094/5-A	Method Blank	114	119	

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

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

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

			Percent	Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
30-35343-A-1-G MS	Matrix Spike	2 S1-	0.2 S1-	
30-35343-A-1-H MSD	Matrix Spike Duplicate	2 S1-	0.2 S1-	
30-35980-A-38-D MS	Matrix Spike	150 S1+	116	
30-35980-A-38-E MSD	Matrix Spike Duplicate	147 S1+	116	
90-5608-1	SS 03	147 S1+	124	
0-5608-2	SS 04	120	104	
90-5608-3	SS 05	135 S1+	116	
90-5608-4	SS 06	111	118	
CS 880-67028/2-A	Lab Control Sample	97	112	
CS 880-67473/2-A	Lab Control Sample	87	93	
CSD 880-67028/3-A	Lab Control Sample Dup	92	105	
CSD 880-67473/3-A	Lab Control Sample Dup	96	107	
B 880-67028/1-A	Method Blank	109	124	
B 880-67473/1-A	Method Blank	135 S1+	122	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-5608-1 Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67061/5-A

Lab Sample ID: LCS 880-67061/1-A

**Matrix: Solid** 

**Analysis Batch: 67021** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

Prep Batch: 67061

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/15/23 11:41	11/16/23 12:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/15/23 11:41	11/16/23 12:38	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed
4-Bromofluorobenzene (Surr)	117		70 - 130	11/15/23 11:41	11/16/23 12:38
1,4-Difluorobenzene (Surr)	154	S1+	70 - 130	11/15/23 11:41	11/16/23 12:38

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 67061

Prep Type: Total/NA

Prep Batch: 67061

Matrix: Solid **Analysis Batch: 67021** 

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1235		mg/Kg		124	70 - 130	
Toluene	0.100	0.08522		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.08726		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	0.200	0.1904		mg/Kg		95	70 - 130	
o-Xylene	0.100	0.09465		mg/Kg		95	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	r Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1,4-Difluorobenzene (Surr)	116	70 - 130

Lab Sample ID: LCSD 880-67061/2-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

**Analysis Batch: 67021** 

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1191		mg/Kg		119	70 - 130	4	35
Toluene	0.100	0.08593		mg/Kg		86	70 - 130	1	35
Ethylbenzene	0.100	0.08452		mg/Kg		85	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1801		mg/Kg		90	70 - 130	6	35
o-Xylene	0.100	0.09651		mg/Kg		97	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery Qua	alifier Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	110	70 - 130

Lab Sample ID: 880-35797-A-81-B MS

Analysis Batch: 67021										e: Total/NA atch: 67061
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0996	0.08388		mg/Kg		84	70 - 130	
Toluene	<0.00199	U F1	0.0996	0.06167	F1	mg/Kg		62	70 - 130	

**Eurofins Carlsbad** 

**Client Sample ID: Matrix Spike** 

Dil Fac

## QC Sample Results

Client: Ensolum Job ID: 890-5608-1 SDG: 03C1558289 Project/Site: Outrider CVB

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

Lab Sample ID: 880-35797-A-81-B MS

**Client Sample ID: Matrix Spike Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 67021** Prep Batch: 67061

	Sample	Sample	<b>Бріке</b>	INIO	M2				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U F1	0.0996	0.06371	F1	mg/Kg		64	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1444		mg/Kg		72	70 - 130	
o-Xylene	<0.00199	U F1	0.0996	0.07765		mg/Kg		78	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 103 1,4-Difluorobenzene (Surr) 70 - 130 98

Lab Sample ID: 880-35797-A-81-C MSD

**Matrix: Solid** 

**Analysis Batch: 67021** 

Prep Batch: 67061 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 0.08417 84 70 - 130 0 35 mg/Kg Toluene <0.00199 UF1 0.100 0.06025 F1 60 70 - 130 35 mg/Kg 2 Ethylbenzene <0.00199 UF1 0.100 0.05329 F1 mg/Kg 53 70 - 130 18 35 m-Xylene & p-Xylene <0.00398 UF1 0.200 0.1270 F1 63 70 - 130 13 35 mq/Kq 0.100 0.06890 F1 69 o-Xylene <0.00199 U F1 mg/Kg 70 - 13012

MSD MSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 90 70 - 130 1,4-Difluorobenzene (Surr) 108

Lab Sample ID: MB 880-67094/5-A

**Matrix: Solid** 

**Client Sample ID: Method Blank** Prep Type: Total/NA Prep Batch: 67094 **Analysis Batch: 67021** MR MR

	IVID IVID	,					
Analyte	Result Qu	ıalifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	0.00200	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
Toluene	<0.00200 U	0.00200	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
Ethylbenzene	<0.00200 U	0.00200	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
m-Xylene & p-Xylene	<0.00400 U	0.00400	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
o-Xylene	<0.00200 U	0.00200	mg/Kg		11/15/23 13:29	11/16/23 00:55	1
Xylenes, Total	<0.00400 U	0.00400	mg/Kg		11/15/23 13:29	11/16/23 00:55	1

MB MB Dil Fac Qualifier Limits Surrogate %Recovery Prepared Analyzed 4-Bromofluorobenzene (Surr) 70 - 130 11/15/23 13:29 11/16/23 00:55 114 119 70 - 130 11/15/23 13:29 11/16/23 00:55 1,4-Difluorobenzene (Surr)

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

Lab Sample ID: MB 880-67028/1-A **Client Sample ID: Method Blank** Matrix: Solid Prep Type: Total/NA Prep Batch: 67028

**Analysis Batch: 67152** 

inaly old Datolli of 102							op =aton	
	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/15/23 09:52	11/16/23 07:31	1

(GRO)-C6-C10

**Eurofins Carlsbad** 

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

Client: Ensolum
Project/Site: Outrider CVB

Job ID: 890-5608-1 SDG: 03C1558289

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

Lab Sample ID: MB 880-67028/1-A
Matrix: Solid
Analysis Batch: 67152

MB MB

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67028

	MB	MB					•	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/15/23 09:52	11/16/23 07:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/15/23 09:52	11/16/23 07:31	1
	MB	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			11/15/23 09:52	11/16/23 07:31	1
o-Terphenyl	124		70 - 130			11/15/23 09:52	11/16/23 07:31	1

Lab Sample ID: LCS 880- Matrix: Solid Analysis Batch: 67152	67028/2-A					Clien	t Saı	mple ID	: Lab Control Sample Prep Type: Total/NA Prep Batch: 67028
			Spike	LCS	LCS				%Rec
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1059		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)			1000	924.3		mg/Kg		92	70 - 130
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	112		70 - 130						

Lab Sample ID: LCSD 660-67026/3-A			Client Sample ID: Lab Control Sample Dup									
Matrix: Solid							<b>Prep Ty</b>	pe: Tot	al/NA			
Analysis Batch: 67152							Prep E	atch: (	<b>37028</b>			
	Spike	LCSD	LCSD				%Rec		RPD			
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit			
Gasoline Range Organics (GRO)-C6-C10	1000	1090		mg/Kg		109	70 - 130	3	20			
Diesel Range Organics (Over C10-C28)	1000	952.9		mg/Kg		95	70 - 130	3	20			
ICSD ICSD												

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: 880-3534 Matrix: Solid Analysis Batch: 67152	3-A-1-G MS						C	lient Sa	mple ID: Matrix Spike Prep Type: Total/NA Prep Batch: 67028
	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 F1	1010	<50.5	U F1	mg/Kg		2	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1010	<50.5	U F1	mg/Kg		0.3	70 - 130
	MS	MS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	2	S1-	70 - 130						
o-Terphenyl	0.2	S1-	70 - 130						

1010

<50.5 U F1

Client: Ensolum

Job ID: 890-5608-1

SDG: 03C1558289

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

Lab Sample ID: 880-35343-A-1-H MSD

**Matrix: Solid** 

**Analysis Batch: 67152** 

Gasoline Range Organics

Project/Site: Outrider CVB

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

Prep Batch: 67028

12

Spike MSD MSD %Rec **RPD** Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1010 <50.5 U F1 mg/Kg 2 70 - 130 10 20

mg/Kg

-0.2

Diesel Range Organics (Over C10-C28)

(GRO)-C6-C10

Analyte

MSD MSD

Sample Sample

<50.0 U F1

<50.0 U F1

Result Qualifier

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	2	S1-	70 - 130
o-Terphenyl	0.2	S1-	70 - 130

Client Sample ID: Method Blank

70 - 130

Prep Type: Total/NA

Prep Batch: 67473

Lab Sample ID: MB 880-67473/1-A **Matrix: Solid** 

**Analysis Batch: 67601** 

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/20/23 15:52	11/22/23 19:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/20/23 15:52	11/22/23 19:49	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/20/23 15:52	11/22/23 19:49	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Anaiyzea	DII Fac
1-Chlorooctane	135	S1+	70 - 130	11/20/23 15:52	11/22/23 19:49	1
o-Terphenyl	122		70 - 130	11/20/23 15:52	11/22/23 19:49	1

Lab Sample ID: LCS 880-67473/2-A

**Matrix: Solid** 

**Analysis Batch: 67601** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 67473

	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	1029		mg/Kg		103	70 - 130	 	
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	986.1		mg/Kg		99	70 - 130		
0.40, 0.00)									

C10-C28)

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	87	70 - 130
o-Terphenyl	93	70 - 130

Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 67601** 

Lab Sample ID: LCSD 880-67473/3-A

Prep Type: Total/NA Prep Batch: 67473

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	997.8		mg/Kg		100	70 - 130	3	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1029		mg/Kg		103	70 - 130	4	20
C10-C28)									

Client: Ensolum Job ID: 890-5608-1 SDG: 03C1558289 Project/Site: Outrider CVB

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

Lab Sample ID: LCSD 880-67473/3-A

**Matrix: Solid** 

**Analysis Batch: 67601** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67473

LCSD LCSD

%Recovery Qualifier Limits Surrogate 1-Chlorooctane 96 70 - 130 o-Terphenyl 107 70 - 130

Client Sample ID: Matrix Spike Lab Sample ID: 880-35980-A-38-D MS

**Analysis Batch: 67601** 

**Matrix: Solid Prep Type: Total/NA** Prep Batch: 67473

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <50.4 U 1000 959.6 mg/Kg 91 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.4 UF1 1000 1386 F1 mg/Kg 136 70 - 130 C10-C28)

MS MS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 150 S1+ 70 - 130 70 - 130 o-Terphenyl 116

Lab Sample ID: 880-35980-A-38-E MSD **Client Sample ID: Matrix Spike Duplicate** Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 67601** 

Prep Batch: 67473 Sample Sample Spike MSD MSD %Rec **RPD** Result Qualifier Added Result Qualifier Limits **RPD** Analyte Unit D %Rec I imit <50.4 U Gasoline Range Organics 1000 1028 mg/Kg 98 70 - 130 20 (GRO)-C6-C10 1000 70 - 130 Diesel Range Organics (Over <50.4 U F1 1374 F1 mg/Kg 135 20

C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane S1+ 70 - 130 147 70 - 130 o-Terphenyl 116

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66795/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 66958** 

MB MB

Result Qualifier RL Unit Dil Fac Analyte Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/14/23 13:29

Lab Sample ID: LCS 880-66795/2-A

**Matrix: Solid** 

**Analysis Batch: 66958** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 230.4 92 mq/Kq

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Client Sample ID: Lab Control Sample** 

## **QC Sample Results**

Client: Ensolum Job ID: 890-5608-1 Project/Site: Outrider CVB SDG: 03C1558289

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-66795/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble Analysis Batch: 66958** LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 231.5 mg/Kg 93 90 - 110 0 20

Lab Sample ID: 890-5606-A-40-B MS **Client Sample ID: Matrix Spike Matrix: Solid Analysis Batch: 66958** 

**Prep Type: Soluble** 

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chloride 253 90 - 110 39.7 267.7 mg/Kg 90

Lab Sample ID: 890-5606-A-40-C MSD **Client Sample ID: Matrix Spike Duplicate** 

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 66958** 

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Limits RPD Limit Unit %Rec Chloride 39.7 253 267.6 90 90 - 110 20 mg/Kg

Client: Ensolum Job ID: 890-5608-1 Project/Site: Outrider CVB SDG: 03C1558289

## **GC VOA**

## **Analysis Batch: 67021**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-1	SS 03	Total/NA	Solid	8021B	67061
890-5608-2	SS 04	Total/NA	Solid	8021B	67061
890-5608-3	SS 05	Total/NA	Solid	8021B	67061
890-5608-4	SS 06	Total/NA	Solid	8021B	67061
MB 880-67061/5-A	Method Blank	Total/NA	Solid	8021B	67061
MB 880-67094/5-A	Method Blank	Total/NA	Solid	8021B	67094
LCS 880-67061/1-A	Lab Control Sample	Total/NA	Solid	8021B	67061
LCSD 880-67061/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67061
880-35797-A-81-B MS	Matrix Spike	Total/NA	Solid	8021B	67061
880-35797-A-81-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67061

## Prep Batch: 67061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-1	SS 03	Total/NA	Solid	5035	
890-5608-2	SS 04	Total/NA	Solid	5035	
890-5608-3	SS 05	Total/NA	Solid	5035	
890-5608-4	SS 06	Total/NA	Solid	5035	
MB 880-67061/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67061/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67061/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-35797-A-81-B MS	Matrix Spike	Total/NA	Solid	5035	
880-35797-A-81-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

### Prep Batch: 67094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67094/5-A	Method Blank	Total/NA	Solid	5035	

## **Analysis Batch: 67296**

<b>Lab Sample ID</b> 890-5608-1	Client Sample ID SS 03	Prep Type Total/NA	Matrix Solid	Method Total BTEX	Prep Batch
890-5608-2	SS 04	Total/NA	Solid	Total BTEX	
890-5608-3	SS 05	Total/NA	Solid	Total BTEX	
890-5608-4	SS 06	Total/NA	Solid	Total BTEX	

## **GC Semi VOA**

## Prep Batch: 67028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-4	SS 06	Total/NA	Solid	8015NM Prep	
MB 880-67028/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67028/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-35343-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-35343-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### **Analysis Batch: 67152**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-4	SS 06	Total/NA	Solid	8015B NM	67028
MB 880-67028/1-A	Method Blank	Total/NA	Solid	8015B NM	67028
LCS 880-67028/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67028
LCSD 880-67028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67028

Client: Ensolum
Project/Site: Outrider CVB
Job ID: 890-5608-1
SDG: 03C1558289

## GC Semi VOA (Continued)

## **Analysis Batch: 67152 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35343-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	67028
880-35343-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67028

### **Analysis Batch: 67309**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-1	SS 03	Total/NA	Solid	8015 NM	
890-5608-2	SS 04	Total/NA	Solid	8015 NM	
890-5608-3	SS 05	Total/NA	Solid	8015 NM	
890-5608-4	SS 06	Total/NA	Solid	8015 NM	

### Prep Batch: 67473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-1	SS 03	Total/NA	Solid	8015NM Prep	
890-5608-2	SS 04	Total/NA	Solid	8015NM Prep	
890-5608-3	SS 05	Total/NA	Solid	8015NM Prep	
MB 880-67473/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67473/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67473/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-35980-A-38-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-35980-A-38-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### **Analysis Batch: 67601**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-1	SS 03	Total/NA	Solid	8015B NM	67473
890-5608-2	SS 04	Total/NA	Solid	8015B NM	67473
890-5608-3	SS 05	Total/NA	Solid	8015B NM	67473
MB 880-67473/1-A	Method Blank	Total/NA	Solid	8015B NM	67473
LCS 880-67473/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67473
LCSD 880-67473/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67473
880-35980-A-38-D MS	Matrix Spike	Total/NA	Solid	8015B NM	67473
880-35980-A-38-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67473

### **HPLC/IC**

### Leach Batch: 66795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-1	SS 03	Soluble	Solid	DI Leach	
890-5608-2	SS 04	Soluble	Solid	DI Leach	
890-5608-3	SS 05	Soluble	Solid	DI Leach	
890-5608-4	SS 06	Soluble	Solid	DI Leach	
MB 880-66795/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66795/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66795/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5606-A-40-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5606-A-40-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## **Analysis Batch: 66958**

Released to Imaging: 3/26/2024 3:19:52 PM

<b>Lab Sample ID</b> 890-5608-1	Client Sample ID SS 03	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 66795
890-5608-2	SS 04	Soluble	Solid	300.0	66795
890-5608-3	SS 05	Soluble	Solid	300.0	66795

**Eurofins Carlsbad** 

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Client: Ensolum
Project/Site: Outrider CVB
Job ID: 890-5608-1
SDG: 03C1558289

## **HPLC/IC (Continued)**

## **Analysis Batch: 66958 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5608-4	SS 06	Soluble	Solid	300.0	66795
MB 880-66795/1-A	Method Blank	Soluble	Solid	300.0	66795
LCS 880-66795/2-A	Lab Control Sample	Soluble	Solid	300.0	66795
LCSD 880-66795/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66795
890-5606-A-40-B MS	Matrix Spike	Soluble	Solid	300.0	66795
890-5606-A-40-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	66795

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Client Sample ID: SS 03

Project/Site: Outrider CVB

Client: Ensolum

Date Collected: 11/08/23 11:35 Date Received: 11/09/23 14:33

Lab Sample ID: 890-5608-1

**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			5.02 g	5 mL	67061	11/15/23 11:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67021	11/16/23 14:08	SM	EET MID
Total/NA	Analysis	Total BTEX		1			67296	11/16/23 14:08	AJ	EET MID
Total/NA	Analysis	8015 NM		1			67309	11/23/23 04:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	67473	11/20/23 15:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67601	11/23/23 04:08	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66795	11/13/23 08:10	CH	EET MID
Soluble	Analysis	300.0		1			66958	11/14/23 15:44	CH	EET MID

Client Sample ID: SS 04 Lab Sample ID: 890-5608-2 Date Collected: 11/08/23 11:40 **Matrix: Solid** 

Date Received: 11/09/23 14:33

Date Received: 11/09/23 14:33

Batch Batch Dil Initial Final Batch Prepared Method Number **Prep Type** Type Run **Factor Amount** Amount or Analyzed **Analyst** Lab Total/NA 5035 67061 11/15/23 11:41 MNR EET MID Prep 5.03 g 5 mL 8021B Total/NA 5 mL 11/16/23 14:29 SM **EET MID** Analysis 5 mL 67021 1 Total/NA Total BTEX Analysis 67296 11/16/23 14:29 AJ **EET MID** 1 Total/NA 8015 NM **EET MID** Analysis 1 67309 11/23/23 04:29 SM Total/NA Prep 8015NM Prep 10.05 g 10 mL 67473 11/20/23 15:52 TKC **EET MID** Total/NA 8015B NM 67601 Analysis 1 uL 1 uL 11/23/23 04:29 SM **EET MID** Soluble 50 mL 66795 11/13/23 08:10 CH Leach DI Leach 4.97 g **EET MID** Soluble 300.0 Analysis 1 66958 11/14/23 15:50 CH **EET MID** 

Client Sample ID: SS 05 Lab Sample ID: 890-5608-3 Date Collected: 11/08/23 11:45 **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			5.01 g	5 mL	67061	11/15/23 11:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67021	11/16/23 14:49	SM	EET MID
Total/NA	Analysis	Total BTEX		1			67296	11/16/23 14:49	AJ	EET MID
Total/NA	Analysis	8015 NM		1			67309	11/23/23 04:51	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	67473	11/20/23 15:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67601	11/23/23 04:51	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66795	11/13/23 08:10	CH	EET MID
Soluble	Analysis	300.0		1			66958	11/14/23 15:56	CH	EET MID

Client Sample ID: SS 06 Lab Sample ID: 890-5608-4 Date Collected: 11/08/23 12:10 Matrix: Solid

Date Received: 11/09/23 14:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	67061	11/15/23 11:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67021	11/16/23 15:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			67296	11/16/23 15:09	AJ	EET MID

## **Lab Chronicle**

Client: Ensolum Job ID: 890-5608-1 Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: SS 06 Lab Sample ID: 890-5608-4

Date Collected: 11/08/23 12:10 **Matrix: Solid** Date Received: 11/09/23 14:33

	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			67309	11/16/23 14:14	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67028	11/15/23 09:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67152	11/16/23 14:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66795	11/13/23 08:10	CH	EET MID
Soluble	Analysis	300.0		1			66958	11/14/23 16:01	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: 890-5608-1 Project/Site: Outrider CVB SDG: 03C1558289

## **Laboratory: Eurofins Midland**

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

Authority	Progra	am	Identification Number	<b>Expiration Date</b>
exas	NELAI	Р	T104704400-23-26	06-30-24
The following analyte	s are included in this reno	rt but the laboratory is r	not certified by the governing authori	tv This list may include
The felletting analyte	o are iniciaaca in tilio repo	it, but the luberatory is i	not certified by the governing authori	ty. Triio not may morac
,	does not offer certification	•	not certified by the governing addition	ry. This list may molade
,	•	•	Analyte	ty. This list may morace
for which the agency	does not offer certification	i.	, , ,	

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# **Method Summary**

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5608-1

SDG: 03C1558289

otocol	Laboratory
V846	EET MID
L SOP	EET MID
V846	EET MID
V846	EET MID
PA	EET MID
V846	EET MID

Method Description	Protocol	Laboratory
/olatile Organic Compounds (GC)	SW846	EET MID
Total BTEX Calculation	TAL SOP	EET MID
Diesel Range Organics (DRO) (GC)	SW846	EET MID
Diesel Range Organics (DRO) (GC)	SW846	EET MID
Anions, Ion Chromatography	EPA	EET MID
Closed System Purge and Trap	SW846	EET MID
Vicroextraction	SW846	EET MID
Deionized Water Leaching Procedure	ASTM	EET MID
֡	Volatile Organic Compounds (GC)  Total BTEX Calculation  Diesel Range Organics (DRO) (GC)  Diesel Range Organics (DRO) (GC)  Anions, Ion Chromatography  Closed System Purge and Trap  Microextraction	Volatile Organic Compounds (GC)  Fotal BTEX Calculation  TAL SOP  Diesel Range Organics (DRO) (GC)  Diesel Range Organics (DRO) (GC)  Anions, Ion Chromatography  Closed System Purge and Trap  SW846  Microextraction  SW846

#### **Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

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: Outrider CVB

Job ID: 890-5608-1

SDG: 03C1558289

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5608-1	SS 03	Solid	11/08/23 11:35	11/09/23 14:33	0.5
890-5608-2	SS 04	Solid	11/08/23 11:40	11/09/23 14:33	0.5
890-5608-3	SS 05	Solid	11/08/23 11:45	11/09/23 14:33	0.5
890-5608-4	SS 06	Solid	11/08/23 12:10	11/09/23 14:33	0.5

City, State ZIP-

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City, State ZIP-

Address:

304 E. (

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State of Project: Program:

Crisbad IVIM

Reporting: Level II | Level III | PST/UST | TRRP |

Level IV

UST/PST ☐ PRP☐ Brownfields☐ RRC☐

Superfund

Work Order Comments

1050 DA

Bill to: (If different)

#201/10g

March

Company Name:

ompany Name:

1750

| Xenco Environment Testing

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Chain of Custody

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

EL-Paso, TX (915) 585-3413, LUBBOCK, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

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

<b>V</b> o
890-5608 Chain of Custody

SAMPLE RECEIPT Sampler's Name: Project Number: Circle Method(s) and Metal(s) to be analyzed amples Received Intact: roject Location: otal Containers: roject Name: ooler Custody Seals: mple Custody Seals. ervice. 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 Total 200.7 / 6010 Relinquished by: (Signature) offirs 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 previous e. 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 Sample Identification 7 055 505 SUNTRAMPINATE 984-850 200.8 / 6020: Yes No Yes No -103.6767 bue Date: Matrix Sampled Thermometer ID: Received by: (Signature) Corrected Temperature Temperature Reading: Correction Factor 記念 Date 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Tl Sn U V Zn Sampled JANA Wet Ice: Routine TAT starts the day received by the lab, if received by 4:30pm 1.35 Time TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U ਰ Turn Around Depth Ö braeli ∏Rush Comp Grab/ 6 8 cont # of Code **Parapleters** 1 emedium con Date/Time Ω Relinquished by: (Signature) ANALYSIS REQUEST Deliverables. Received by: (Signature) Hg: 1631 / 245.1 / 7470 / 7471 ADaPT [] HCL. HC る S NaOH+Ascorbic Acid. SAPC Zn Acetate+NaOH: Zn Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> NaSO<sub>3</sub> NaHSO 4. NABIS H3PO4 HP H2SO 4. H2 Cool Cool None NO nA PP 233065 II 1036 Of transcort Preservative Codes ample Comments Date/Time 00 NH E ONH DI Water: H<sub>2</sub>O NaOH: Na MeOH Me

levised Date: 08/25/2020 Rev. 2020.2

# **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-5608-1 SDG Number: 03C1558289

Login Number: 5608 **List Source: Eurofins Carlsbad** 

List Number: 1

Creator: Bruns, Shannon

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

# **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-5608-1

SDG Number: 03C1558289

Login Number: 5608
List Source: Eurofins Midland
List Number: 2
List Creation: 11/13/23 09:24 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").

**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Ben Belill

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 11/28/2023 11:23:44 AM

# **JOB DESCRIPTION**

Outrider CVB 03C1558289

# **JOB NUMBER**

890-5651-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



# **Eurofins Carlsbad**

# **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

# **Authorization**

Generated 11/28/2023 11:23:44 AM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies Page 2 of 25

Client: Ensolum
Project/Site: Outrider CVB
Laboratory Job ID: 890-5651-1
SDG: 03C1558289

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# **Definitions/Glossary**

Job ID: 890-5651-1 Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

#### **Qualifiers**

## **GC VOA**

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

## **GC Semi VOA**

#### Qualifier **Qualifier Description**

S1-Surrogate recovery exceeds control limits, low biased. 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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac **Dilution Factor** 

Detection Limit (DoD/DOE) DL

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) Most Probable Number MPN MQL Method Quantitation Limit

NC Not Calculated

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

NFG 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)

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

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

**TNTC** Too Numerous To Count

#### **Case Narrative**

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5651-1 SDG: 03C1558289

Job ID: 890-5651-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-5651-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 11/17/2023 9:31 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was  $3.2^{\circ}$ C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-5651-1), PH01 (890-5651-2), PH02 (890-5651-3) and PH02 (890-5651-4).

#### **GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-35973-A-1-E). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: PH01 (890-5651-1), (890-5667-A-1-C MS) and (890-5667-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### HPLC/IC

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

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Lab Sample ID: 890-5651-1

# **Client Sample Results**

Client: EnsolumJob ID: 890-5651-1Project/Site: Outrider CVBSDG: 03C1558289

Client Sample ID: PH01

Date Collected: 11/15/23 10:00 Date Received: 11/17/23 09:31

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:19	11/27/23 14:19	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:19	11/27/23 14:19	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:19	11/27/23 14:19	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/21/23 16:19	11/27/23 14:19	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:19	11/27/23 14:19	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/21/23 16:19	11/27/23 14:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			11/21/23 16:19	11/27/23 14:19	1
1,4-Difluorobenzene (Surr)	73		70 - 130			11/21/23 16:19	11/27/23 14:19	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/27/23 14:19	1
- -								
Mothod: SW846 8015 NM - Diese	I Rango Organ	ice (DRO) (	3C)					
Method: SW846 8015 NM - Diese Analyte	•	ics (DRO) ( Qualifier	GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	•	Qualifier	,	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/27/23 16:25	Dil Fac
Analyte Total TPH		Qualifier U	50.1		<u>D</u>	Prepared		
Analyte	Result <50.1	Qualifier U	50.1		<u>D</u>	Prepared Prepared		
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <50.1	Qualifier Unics (DRO) Qualifier	RL 50.1	mg/Kg			11/27/23 16:25	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.1 sel Range Orga	Qualifier U  nics (DRO) Qualifier U	FL 50.1 (GC)	mg/Kg		Prepared	11/27/23 16:25 Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies	Result <50.1 sel Range Orga Result <50.1	Qualifier U  nics (DRO) Qualifier U	RL	mg/Kg  Unit  mg/Kg		Prepared 11/22/23 14:59	11/27/23 16:25  Analyzed  11/27/23 16:25	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U  nics (DRO) Qualifier U  U	RL 50.1  (GC)  RL 50.1  50.1	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 14:59 11/22/23 14:59	11/27/23 16:25  Analyzed  11/27/23 16:25  11/27/23 16:25	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U  nics (DRO) Qualifier U  U	RL 50.1  (GC)  RL 50.1  50.1  50.1	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 14:59 11/22/23 14:59 11/22/23 14:59	Analyzed 11/27/23 16:25  11/27/23 16:25 11/27/23 16:25 11/27/23 16:25	Dil Fac  1  1  Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U  nics (DRO) Qualifier U  U	RL	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 14:59 11/22/23 14:59 11/22/23 14:59 Prepared	Analyzed 11/27/23 16:25  Analyzed 11/27/23 16:25 11/27/23 16:25 Analyzed	1 Dil Fac 1 1 1 1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier U  nics (DRO) Qualifier U  U  Qualifier S1-	RL 50.1  (GC)  RL 50.1  50.1  50.1  Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 14:59 11/22/23 14:59 11/22/23 14:59 Prepared 11/22/23 14:59	11/27/23 16:25  Analyzed  11/27/23 16:25  11/27/23 16:25  Analyzed  11/27/23 16:25	1 Dil Fac 1 1
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U  nics (DRO) Qualifier U  U  Qualifier S1-	RL 50.1  (GC)  RL 50.1  50.1  50.1  Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 14:59 11/22/23 14:59 11/22/23 14:59 Prepared 11/22/23 14:59	11/27/23 16:25  Analyzed  11/27/23 16:25  11/27/23 16:25  Analyzed  11/27/23 16:25	1 1 1 Dil Fac 1

Client Sample ID: PH01

Date Collected: 11/15/23 10:25 Date Received: 11/17/23 09:31

Date Received: 11/11/20 05.

Sample Depth: 5.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 14:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 14:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 14:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/21/23 16:19	11/27/23 14:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 14:40	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/21/23 16:19	11/27/23 14:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			11/21/23 16:19	11/27/23 14:40	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-5651-2

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Matrix: Solid

Lab Sample ID: 890-5651-2

Job ID: 890-5651-1

Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH01** 

Date Collected: 11/15/23 10:25 Date Received: 11/17/23 09:31

Sample Depth: 5.5

Method: SW846 8021B -	<b>Volatile Organic</b>	Compounds (	GC)	(Continued)	

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	70	70 - 130	11/21/23 16:19	11/27/23 14:40	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399 U	0.00399	mg/Kg			11/27/23 14:40	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/27/23 16:49	1

Method: SW846 8015B NM - Diesel Range Organics	(DRO)	(GC)	١
motified. Offerto College Ithin Biodol Rungo Organico	(5.10)	, , , , ,	,

moundar office of 102 inn Biod								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.4	U	50.4	mg/Kg		11/22/23 14:59	11/27/23 16:49	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.4	U	50.4	mg/Kg		11/22/23 14:59	11/27/23 16:49	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/22/23 14:59	11/27/23 16:49	1
Surrogate	%Recovery	Qualifier	l imits			Prenared	Analyzod	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80	70 - 130	11/22/23 14:5	11/27/23 16:49	1
o-Terphenyl	74	70 - 130	11/22/23 14:5	11/27/23 16:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.2		5.00	mg/Kg			11/22/23 04:07	1

**Client Sample ID: PH02** Lab Sample ID: 890-5651-3 Matrix: Solid

Date Collected: 11/15/23 10:35 Date Received: 11/17/23 09:31

Sample Depth: 1

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

Welliou. Stroto ouz ID - Volati	le Organic Comp	ounus (OC)	,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 15:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 15:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 15:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/21/23 16:19	11/27/23 15:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 15:00	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/21/23 16:19	11/27/23 15:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			11/21/23 16:19	11/27/23 15:00	1
1 4-Difluorobenzene (Surr)	75		70 130			11/21/23 16:10	11/27/23 15:00	1

Mothod: TAI	SOP Total RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/27/23 15:00	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (G
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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	67.3		50.1	mg/Kg			11/27/23 17:11	1

Lab Sample ID: 890-5651-3

Job ID: 890-5651-1

Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH02** 

Date Collected: 11/15/23 10:35 Date Received: 11/17/23 09:31

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.1	U	50.1	mg/Kg		11/22/23 14:59	11/27/23 17:11	1
(GRO)-C6-C10								
Diesel Range Organics (Over	67.3		50.1	mg/Kg		11/22/23 14:59	11/27/23 17:11	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		11/22/23 14:59	11/27/23 17:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130			11/22/23 14:59	11/27/23 17:11	1
o-Terphenyl	72		70 - 130			11/22/23 14:59	11/27/23 17:11	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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**Client Sample ID: PH02** Lab Sample ID: 890-5651-4 Date Collected: 11/15/23 11:00 Matrix: Solid

Date Received: 11/17/23 09:31

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:19	11/27/23 16:28	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:19	11/27/23 16:28	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:19	11/27/23 16:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/21/23 16:19	11/27/23 16:28	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:19	11/27/23 16:28	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/21/23 16:19	11/27/23 16:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130			11/21/23 16:19	11/27/23 16:28	1
1,4-Difluorobenzene (Surr)	90		70 - 130			11/21/23 16:19	11/27/23 16:28	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/27/23 16:28	1
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	59.5		50.5	mg/Kg			11/27/23 17:33	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/22/23 14:59	11/27/23 17:33	1
Diesel Range Organics (Over C10-C28)	59.5		50.5	mg/Kg		11/22/23 14:59	11/27/23 17:33	1
Oll Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/22/23 14:59	11/27/23 17:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130			11/22/23 14:59	11/27/23 17:33	1

# **Client Sample Results**

Client: Ensolum Job ID: 890-5651-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH02** Lab Sample ID: 890-5651-4 Matrix: Solid

Date Collected: 11/15/23 11:00 Date Received: 11/17/23 09:31

Sample Depth: 5

Method: EPA 300.0 - Anions, Ion C	hromatograp	hy - Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.5		5.01	mg/Kg			11/22/23 04:21	1

# **Surrogate Summary**

Client: Ensolum Job ID: 890-5651-1 Project/Site: Outrider CVB SDG: 03C1558289

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)	
380-35973-A-1-C MS	Matrix Spike	114	106	
880-35973-A-1-D MSD	Matrix Spike Duplicate	117	97	
390-5651-1	PH01	103	73	
390-5651-2	PH01	98	70	
390-5651-3	PH02	107	75	
390-5651-4	PH02	79	90	
_CS 880-67582/1-A	Lab Control Sample	109	103	
LCSD 880-67582/2-A	Lab Control Sample Dup	111	103	
MB 880-67582/5-A	Method Blank	72	72	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Sample ID	Client Sample ID	(70-130)	(70-130)	
-5651-1	PH01	74	67 S1-	
-5651-2	PH01	80	74	
-5651-3	PH02	77	72	
5651-4	PH02	79	74	
-5667-A-1-C MS	Matrix Spike	78	68 S1-	
5667-A-1-D MSD	Matrix Spike Duplicate	80	68 S1-	
880-67649/2-A	Lab Control Sample	107	114	
D 880-67649/3-A	Lab Control Sample Dup	128	130	
880-67649/1-A	Method Blank	98	99	

1CO = 1-Chlorooctane OTPH = o-Terphenyl

**Eurofins Carlsbad** 

Released to Imaging: 3/26/2024 3:19:52 PM

Client: Ensolum Job ID: 890-5651-1 Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67582/5-A

**Matrix: Solid** Analysis Batch: 67690 Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 67582

MB MB

	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 11:27	1
	Toluene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 11:27	1
	Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 11:27	1
	m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/21/23 16:19	11/27/23 11:27	1
	o-Xylene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:19	11/27/23 11:27	1
	Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/21/23 16:19	11/27/23 11:27	1
-1									

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72	70 - 130	11/21/23 16:19	11/27/23 11:27	1
1,4-Difluorobenzene (Surr)	72	70 - 130	11/21/23 16:19	11/27/23 11:27	1

Lab Sample ID: LCS 880-67582/1-A

**Matrix: Solid** 

Analysis Batch: 67690

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 67582

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09952 mg/Kg 100 70 - 130 Toluene 0.100 0.09407 mg/Kg 94 70 - 130 0.100 Ethylbenzene 0.1039 mg/Kg 104 70 - 130 0.200 109 70 - 130 m-Xylene & p-Xylene 0.2180 mg/Kg

0.1042

mg/Kg

0.100

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-67582/2-A

**Matrix: Solid** 

o-Xylene

Analysis Batch: 67690

Client Sample ID: Lab Control Sample Dup
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70 - 130

104

Prep Type: Total/NA

Prep Batch: 67582

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09394		mg/Kg		94	70 - 130	6	35	
Toluene	0.100	0.08565		mg/Kg		86	70 - 130	9	35	
Ethylbenzene	0.100	0.09515		mg/Kg		95	70 - 130	9	35	
m-Xylene & p-Xylene	0.200	0.1979		mg/Kg		99	70 - 130	10	35	
o-Xylene	0.100	0.09447		mg/Kg		94	70 - 130	10	35	

LCSD LCSD

Surrogate	%Recovery Qualific	er Limits
4-Bromofluorobenzene (Surr)	111	70 - 130
1 4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: 880-35973-A-1-C MS

**Matrix: Solid** 

Analysis Batch: 67690

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

Prep Batch: 67582

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0996	0.08406		mg/Kg		84	70 - 130	 
Toluene	<0.00200	U	0.0996	0.07639		mg/Kg		76	70 - 130	

Client: Ensolum

Job ID: 890-5651-1

SDG: 03C1558289

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

Lab Sample ID: 880-35973-A-1-C MS

**Matrix: Solid** 

Analysis Batch: 67690

Project/Site: Outrider CVB

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 67582

	Sample	Sample	<b>Spike</b>	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00200	U	0.0996	0.08490		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1762		mg/Kg		88	70 - 130
o-Xylene	<0.00200	U	0.0996	0.08410		mg/Kg		84	70 - 130

MS MS

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	114	70 - 130
1,4-Difluorobenzene (Surr)	106	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 67582

Analysis Batch: 67690

**Matrix: Solid** 

Lab Sample ID: 880-35973-A-1-D MSD

Sample Sample Spike MSD MSD RPD Result Qualifier Result Qualifier RPD Limit Analyte Added Unit %Rec Limits Benzene <0.00200 U 0.0998 0.07624 mg/Kg 76 70 - 130 10 35 73 Toluene <0.00200 U 0.0998 0.07310 mg/Kg 70 - 130 4 35 Ethylbenzene <0.00200 U 0.0998 0.08278 83 70 - 130 3 35 mg/Kg <0.00401 U 0.200 0.1684 70 - 130 35 m-Xylene & p-Xylene mg/Kg 5 0.0998 <0.00200 U 0.08049 81 70 - 130 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	117	70 - 130
1,4-Difluorobenzene (Surr)	97	70 - 130

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

Lab Sample ID: MB 880-67649/1-A

**Matrix: Solid** 

Analysis Batch: 67686

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67649

	IVID	IAID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/22/23 14:59	11/27/23 07:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/22/23 14:59	11/27/23 07:57	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/22/23 14:59	11/27/23 07:57	1

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	11/22/23 14:59	11/27/23 07:57	1
o-Terphenyl	99		70 - 130	11/22/23 14:59	11/27/23 07:57	1

Lab Sample ID: LCS 880-67649/2-A

**Matrix: Solid** 

Analysis Batch: 67686

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 67649

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	989.1		mg/Kg		99	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1050		mg/Kg		105	70 - 130	
C10-C28)								

Job ID: 890-5651-1 Client: Ensolum Project/Site: Outrider CVB

SDG: 03C1558289

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

LCS LCS

Lab Sample ID: LCS 880-67649/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

Analysis Batch: 67686

Prep Type: Total/NA

Prep Batch: 67649

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 107 70 - 130 o-Terphenyl 114 70 - 130

Lab Sample ID: LCSD 880-67649/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Analysis Batch: 67686

Prep Type: Total/NA

Prep Batch: 67649

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 1189 119 70 - 13018 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1248 mg/Kg 125 70 - 13017 20 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 128 70 - 130 o-Terphenyl 130

Lab Sample ID: 890-5667-A-1-C MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 67686** 

Prep Type: Total/NA

Prep Batch: 67649

Sample Sample MS MS Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.2 U 1010 763.8 mg/Kg 72 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.2 U 1010 749.5 mg/Kg 71 70 - 130 C10-C28)

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

Lab Sample ID: 890-5667-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 67686

Prep Type: Total/NA

Prep Batch: 67649

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics <50.2 U 1010 788.4 75 70 - 130 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.2 U 1010 767.2 mg/Kg 73 70 - 130 2 20

C10-C28)

MSD MSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 80 70 - 130 68 S1-70 - 130 o-Terphenyl

Client: Ensolum Job ID: 890-5651-1 Project/Site: Outrider CVB SDG: 03C1558289

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67441/1-A

**Matrix: Solid** 

Analysis Batch: 67627

Analyte

Chloride

Client Sample ID: Method Blank **Prep Type: Soluble** 

MB MB Dil Fac Result Qualifier RL Unit D Prepared Analyzed <5.00 U 5.00 mg/Kg 11/22/23 03:28

Lab Sample ID: LCS 880-67441/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 67627** 

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 254.9 mg/Kg 102 90 - 110

Lab Sample ID: LCSD 880-67441/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 67627

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 255.8 mg/Kg 102 90 - 110

Lab Sample ID: 890-5651-1 MS **Client Sample ID: PH01 Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 67627** 

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 7.71 250 263.3 102 90 - 110 mg/Kg

Lab Sample ID: 890-5651-1 MSD

**Matrix: Solid** 

Analysis Batch: 67627

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 7.71 264.1 mg/Kg 103 90 - 110 0 20

**Eurofins Carlsbad** 

**Client Sample ID: PH01** 

**Prep Type: Soluble** 

# **QC Association Summary**

Client: EnsolumJob ID: 890-5651-1Project/Site: Outrider CVBSDG: 03C1558289

**GC VOA** 

Prep Batch: 67582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5651-1	PH01	Total/NA	Solid	5035	
890-5651-2	PH01	Total/NA	Solid	5035	
890-5651-3	PH02	Total/NA	Solid	5035	
890-5651-4	PH02	Total/NA	Solid	5035	
MB 880-67582/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67582/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67582/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-35973-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-35973-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 67690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5651-1	PH01	Total/NA	Solid	8021B	67582
890-5651-2	PH01	Total/NA	Solid	8021B	67582
890-5651-3	PH02	Total/NA	Solid	8021B	67582
890-5651-4	PH02	Total/NA	Solid	8021B	67582
MB 880-67582/5-A	Method Blank	Total/NA	Solid	8021B	67582
LCS 880-67582/1-A	Lab Control Sample	Total/NA	Solid	8021B	67582
LCSD 880-67582/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67582
880-35973-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	67582
880-35973-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67582

**Analysis Batch: 67786** 

La	ab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
89	90-5651-1	PH01	Total/NA	Solid	Total BTEX
89	90-5651-2	PH01	Total/NA	Solid	Total BTEX
89	90-5651-3	PH02	Total/NA	Solid	Total BTEX
89	90-5651-4	PH02	Total/NA	Solid	Total BTEX

**GC Semi VOA** 

Prep Batch: 67649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5651-1	PH01	Total/NA	Solid	8015NM Prep	
890-5651-2	PH01	Total/NA	Solid	8015NM Prep	
890-5651-3	PH02	Total/NA	Solid	8015NM Prep	
890-5651-4	PH02	Total/NA	Solid	8015NM Prep	
MB 880-67649/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67649/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67649/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5667-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5667-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 67686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-5651-1	PH01	Total/NA	Solid	8015B NM	67649	
890-5651-2	PH01	Total/NA	Solid	8015B NM	67649	
890-5651-3	PH02	Total/NA	Solid	8015B NM	67649	
890-5651-4	PH02	Total/NA	Solid	8015B NM	67649	
MB 880-67649/1-A	Method Blank	Total/NA	Solid	8015B NM	67649	
LCS 880-67649/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67649	

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# **QC Association Summary**

Client: Ensolum Job ID: 890-5651-1
Project/Site: Outrider CVB SDG: 03C1558289

# GC Semi VOA (Continued)

# Analysis Batch: 67686 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-67649/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67649
890-5667-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	67649
890-5667-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67649

### **Analysis Batch: 67799**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5651-1	PH01	Total/NA	Solid	8015 NM	
890-5651-2	PH01	Total/NA	Solid	8015 NM	
890-5651-3	PH02	Total/NA	Solid	8015 NM	
890-5651-4	PH02	Total/NA	Solid	8015 NM	

### **HPLC/IC**

#### Leach Batch: 67441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5651-1	PH01	Soluble	Solid	DI Leach	
890-5651-2	PH01	Soluble	Solid	DI Leach	
890-5651-3	PH02	Soluble	Solid	DI Leach	
890-5651-4	PH02	Soluble	Solid	DI Leach	
MB 880-67441/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67441/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67441/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5651-1 MS	PH01	Soluble	Solid	DI Leach	
890-5651-1 MSD	PH01	Soluble	Solid	DI Leach	

#### **Analysis Batch: 67627**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5651-1	PH01	Soluble	Solid	300.0	67441
890-5651-2	PH01	Soluble	Solid	300.0	67441
890-5651-3	PH02	Soluble	Solid	300.0	67441
890-5651-4	PH02	Soluble	Solid	300.0	67441
MB 880-67441/1-A	Method Blank	Soluble	Solid	300.0	67441
LCS 880-67441/2-A	Lab Control Sample	Soluble	Solid	300.0	67441
LCSD 880-67441/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67441
890-5651-1 MS	PH01	Soluble	Solid	300.0	67441
890-5651-1 MSD	PH01	Soluble	Solid	300.0	67441

SDG: 03C1558289

**Client Sample ID: PH01** 

Project/Site: Outrider CVB

Client: Ensolum

Lab Sample ID: 890-5651-1

Date Collected: 11/15/23 10:00

Matrix: Solid

Date Received: 11/17/23 09:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	67582	11/21/23 16:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67690	11/27/23 14:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67786	11/27/23 14:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			67799	11/27/23 16:25	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	67649	11/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/27/23 16:25	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	67441	11/20/23 14:58	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67627	11/22/23 03:48	SMC	EET MID

**Client Sample ID: PH01** Lab Sample ID: 890-5651-2

Date Collected: 11/15/23 10:25

Matrix: Solid

Date Received: 11/17/23 09:31

	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	67582	11/21/23 16:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67690	11/27/23 14:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67786	11/27/23 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			67799	11/27/23 16:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	67649	11/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/27/23 16:49	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	67441	11/20/23 14:58	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67627	11/22/23 04:07	SMC	EET MID

**Client Sample ID: PH02** Lab Sample ID: 890-5651-3

Date Collected: 11/15/23 10:35 Date Received: 11/17/23 09:31

**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	67582	11/21/23 16:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67690	11/27/23 15:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67786	11/27/23 15:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			67799	11/27/23 17:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	67649	11/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/27/23 17:11	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	67441	11/20/23 14:58	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67627	11/22/23 04:14	SMC	EET MID

**Client Sample ID: PH02** Lab Sample ID: 890-5651-4

Date Collected: 11/15/23 11:00 Date Received: 11/17/23 09:31

**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			4.96 g	5 mL	67582	11/21/23 16:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67690	11/27/23 16:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67786	11/27/23 16:28	SM	EET MID

## **Lab Chronicle**

Client: Ensolum Job ID: 890-5651-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH02** 

Lab Sample ID: 890-5651-4 Date Collected: 11/15/23 11:00

Matrix: Solid

Date Received: 11/17/23 09:31

	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			67799	11/27/23 17:33	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67649	11/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/27/23 17:33	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	67441	11/20/23 14:58	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67627	11/22/23 04:21	SMC	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: 890-5651-1
Project/Site: Outrider CVB SDG: 03C1558289

**Laboratory: Eurofins Midland** 

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
,	are included in this report, bu	it the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM	8015 NM		Total TPH	
Total BTEX	Total BTEX		Total BTEX	

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# **Method Summary**

Client: Ensolum Job ID: 890-5651-1 Project/Site: Outrider CVB SDG: 03C1558289

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	EPA	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

EPA = US Environmental Protection Agency

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: Outrider CVB

Job ID: 890-5651-1

SDG: 03C1558289

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5651-1	PH01	Solid	11/15/23 10:00	11/17/23 09:31	2
890-5651-2	PH01	Solid	11/15/23 10:25	11/17/23 09:31	5.5
890-5651-3	PH02	Solid	11/15/23 10:35	11/17/23 09:31	1
890-5651-4	PH02	Solid	11/15/23 11:00	11/17/23 09:31	5

# 11/28/2023

# **Chain of Custody**

eurofins **Environment Testing** Xenco

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

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

Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No:	

						-									www.xe	enco.cor	m rage		01
Project Manager:	Ben Be	ill			Bill to: (if diff	ferent)	G	ar	ret.	+ ()	red	)			Worl	Order	Comments		
Company Name:	Ensolu		10		Company N	ame:	X	10	en	00	14		Program		ST PR	P B	rownfields 🗌	RRC 🗌	Superfund
Address:	3122 Nat	Onc	1 Pork	SHUY	Address:		3104 E Greene St			State of F			_	_		_			
City, State ZIP:			114,89		City, State Z		C	مرا	Sbc	chi	SIMIC	8220		_					Level IV
Phone:	469-4654	-08	352	Email:	BBel	110	CV	150	UN	1.00	SM		Deliveral	oles: EC	DD L	AD	DaPT 🗌	Other:	
Project Name:	outride	50	VB	Turn	Around						ANAL	YSIS REQUI	ST				Pres	ervative	Codes
Project Number:	030155	829	59	Routine	Rush	Pres. Code											None: NO		DI Water: H₂O
Project Location:	32, 1450	74-1	03.678	Eue Date:					1148	Hannanan	20121 0011 12 <b>00</b>	LEDON BURN BURN	111111				Cool: Cool	1	MeOH: Me
Sampler's Name:	Scrah we	71		TAT starts the	day received b				L III				liilli.				HCL: HC		HNO 3: HN
PO #:			3	the lab, if rec	eived by 4:30pr	<u>π</u> δ							M111				H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>		NaOH: Na
SAMPLE RECEIPT	Temp Bla		Yes No	Wet Ice:	Yes No												H <sub>3</sub> PO <sub>4</sub> : HF		
Samples Received Inta	Yes No		Thermomet		TUM -0.0				89	0-5651	Chain of C	Justody					NaHSO 4: Na 2S 2O3:		
Cooler Custody Seals:		- 1</td <td>Correction F</td> <td></td> <td>24</td> <td>_</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>Zn Acetate</td> <td></td> <td>Zn</td>	Correction F		24	_		X					1				Zn Acetate		Zn
Sample Custody Seals: Total Containers:	: Tes No	N/A		emperature:	3.2		1	15	]+								NaOH+Aso		
			Date	Time	G	rab/ # of	1 ~	17	2							_	Com	ala Cam	
Sample Identi	ification	Matrix	Sampled	Sampled	Depth Co	omp Cont	(	Z	) 1-								Sam	ple Com	iments
PHO		5	11/15/2	00.00		7	X	X	X								Cos	+ ce	nter
10H9				10:25	5.5	1 1	1	1				-					1036	55	001
pH02				10:35		111		$\perp$	11					_					TH
PHO2				11:90	5	111	$\sqcup$									-	nAPPS	.330	651124
						111	$\sqcup$		1				+	_					
						111	$\square$	+	-				++			-		-	
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			- \/			- W	-	1	W							+			
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Total 200.7 / 601				RCRA 13PF													Sr TI Sn U .1 / 7470 / 7		
Circle Method(s)					PLP 6010 :										ng: 103	1 / 243.	.1 / /4/0 / /	4/1	
Notice: Signature of this doc of service. Eurofins Xenco w	ill be liable only for the co	st of samp	les and shall not	assume any respon	onsibility for any k	osses or exper	nses Inci	urred by t	he client i	such losses	are due to cir	cumstances bey	and the contro	ı					
of Eurofins Xenco. A minimu		e applied t	_			submitted to				_						Cimari		Det	/T:
Relinquished by:	(Signature)	12 -	Beceived	by: (Signatur	e)		Dat	e/Time	5	Relin		oy: (Signatu	re)	Kecei	ved by: (	Signatu	ire)	Date	/Time
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Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 1/19/2024 2:31:29 PM

Page 23 of 25

Phone. 575-988-3199 Fax 575-988-3199

# **Chain of Custody Record**



💸 eurofins

**Environment Testing** 

11/28/2023

#### **Eurofins Carlsbad** 1089 N Canal St. Carlsbad NM 88220

Client Information (Sub Contract Lab)	1			Lab PM Krame	o PM amer, Jessica							Carrier Tracking No(s):						COC No: 890-1825 1	
Client Contact: Shipping/Receiving				E-Mail								State of Origin				1	Page		
Company <sup>.</sup>					ca Kramer@et.eurofinsus com New Mexico Page 1 of 1  Accreditations Required (See note):  Job #-														
Eurofins Environment Testing South Centr Address	B		****		NELAP - Texas 890-5651-1														
1211 W Florida Ave	Due Date Requested 11/27/2023								Ana	alysi	s Red	ues	ted				- [	Preservation Codes	s M Hexane
City Mıdland	TAT Requested (days	s):					T		Т	1	T			Т	Т	1	I	A HCL B NaOH	N None
State Zip:						_		l								1		D Nitric Acid	O AsNaO2 P Na2O4S
TX, 79701						H		-			-							F NaHSO4	Q Na2SO3 R - Na2S2O3
Phone: 432-704-5440(Tel)	PO#:					) Fu										1,000		G Amchlor	S H2SO4 T TSP Dodecahydrate
Email	WO #:				(ON	JOJW) c		hlorid	X									l Ice	U Acetone V - MCAA
Project Name.	Project #:			—— <u>}</u>		Pre		£	18			İ					tainers	K-EDTA	W pH 4-5 Y - Trizma
outrider cv13 Site:	89000093 SSOW#		***************************************		Se S	N S		E	<u>5</u>									4	Z other (specify)
	33044#			J.	) OS	015N		00	9	ج ا							103 Jo	Other <sup>.</sup>	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Mar Type (W=v (C=Comp, O=wa: G=grab) BT=Tissu	/ater olid, ite/oil,	Perform MS/W	8015MOD_NM/8015NM_S_Prep (MOD) Full	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/6036FP_Calc (MOD) BTEX	Total_BTEX_GCV							Total Number	Special Inst	tructions/Note <sup>.</sup>
		><	Preservation C	COURSE PRODUCE AND	<b>OX</b>												X		. delicities in the
ph01 (890-5651-1)	11/15/23	10 00 Mountain	Sc	lid		х	х	х	х	x							1		50.
ph01 (890-5651-2)	11/15/23	10 25 Mountain	Sc	ild		х	х	х	х	x							1		***************************************
ph02 (890-5651-3)	11/15/23	10 35 Viountain	Sc	lid		х	х	х	х	x		Ī					1	——————————————————————————————————————	
ph02 (890-5651-4)	11/15/23	11 00 Mountain	Sc	lid		х	х	х	х	х							1		
									1			<del> </del>							
														1			241		
					1			$\top$	$\top$			1			1				
Note Since laboratory accreditations are subject to change, Eurofins Environmen laboratory does not currently maintain accreditation in the State of Origin listed ab accreditation status should be brought to Eurofins Environment Testing South Cer	ove for analysis/tests/m	atrix being ar	nalyzed the samples	must he sl	hinned	hack to	n the F	Furofine	Envi	mnma	ot Tactir	na Sou	th Cant	ral III	^ laborat	ton/ or o	thari	inetaictione will be provi	idad Anyahanaa ia
Possible Hazard Identification					Sai	mple	Disp	osal	(Af	ee ma					-	re ret	aine	ed longer than 1 n	nonth)
Unconfirmed							To C					sal B	y Lab		<u></u>	Arch	ive For	Months	
Deliverable Requested   II   II   V Other (specify)   Primary Deliverable Rank 2   Special Instructions/QC Requirements																			
Empty Kit Relinquished by	i	Date			Time			$\parallel$	11		Δ		Metho	od of S	nipment:				
Relinquished by:	Date/Time		Compa	ny			ived by		W.		D	M	U		Date/Tim	e			Company
Relinquished by	Date/Time		Compa	ny		Recei	ved by		••••					Ī	Date/Tim	e:			Company
Relinquished by	Date/Time:		Compa	ny	Received by					Date/Time Cor			Company						
Custody Seals Intact: Custody Seal No Δ Yes Δ No			J			Coole	er Tem	peratu	re(s) °	C and	Other R	emark	\$.						
2 100 2 110						<u></u>				***********									Ver. 06/08/2021

# **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-5651-1 SDG Number: 03C1558289

Login Number: 5651 List Source: Eurofins Carlsbad

List Number: 1

Creator: Lopez, Abraham

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

# **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-5651-1 SDG Number: 03C1558289

**List Source: Eurofins Midland** 

Login Number: 5651 List Number: 2 List Creation: 11/20/23 10:41 AM

Creator: Kramer, Jessica

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

**Eurofins Carlsbad** 

<6mm (1/4").

**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Ben Belill Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 11/28/2023 12:48:28 PM

# **JOB DESCRIPTION**

Outrider CVB 03C1558289

# **JOB NUMBER**

890-5652-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

# **Eurofins Carlsbad**

# **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

# **Authorization**

Generated 11/28/2023 12:48:28 PM

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

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

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Client: Ensolum
Project/Site: Outrider CVB
Laboratory Job ID: 890-5652-1
SDG: 03C1558289

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# **Definitions/Glossary**

Client: Ensolum Job ID: 890-5652-1 SDG: 03C1558289 Project/Site: Outrider CVB

#### **Qualifiers**

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١	١	v		v	•	•

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

#### **GC Semi VOA**

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

**Qualifier Description** 

#### HPLC/IC Qualifier

U	Indicates the analyte was analyzed for but not detected

## d.

## **Glossary**

LOD

LOQ

MCL

MDA

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

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)

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Activity (Radiochemistry)

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

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

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

#### Case Narrative

Client: Ensolum

Job ID: 890-5652-1 Project/Site: Outrider CVB SDG: 03C1558289

Job ID: 890-5652-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-5652-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits,

#### Receipt

The samples were received on 11/17/2023 9:31 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-5652-1), FS02 (890-5652-2), SW01 (890-5652-3) and SW02 (890-5652-4).

#### **GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-67587/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (CCV 880-67689/33) and (LCSD 880-67587/2-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-67694/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67587 and analytical batch 880-67689 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

#### GC Semi VOA

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: (890-5667-A-1-C MS) and (890-5667-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### HPLC/IC

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

Lab Sample ID: 890-5652-1

# **Client Sample Results**

Client: Ensolum Job ID: 890-5652-1
Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: FS01

Date Collected: 11/16/23 10:25 Date Received: 11/17/23 09:31

Sample Depth: - 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199	mg/Kg		11/21/23 16:50	11/28/23 02:25	1
Toluene	< 0.00199	U F1	0.00199	mg/Kg		11/21/23 16:50	11/28/23 02:25	1
Ethylbenzene	< 0.00199	U F1	0.00199	mg/Kg		11/21/23 16:50	11/28/23 02:25	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398	mg/Kg		11/21/23 16:50	11/28/23 02:25	1
o-Xylene	< 0.00199	U F1	0.00199	mg/Kg		11/21/23 16:50	11/28/23 02:25	1
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		11/21/23 16:50	11/28/23 02:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/21/23 16:50	11/28/23 02:25	1
1,4-Difluorobenzene (Surr)	92		70 - 130			11/21/23 16:50	11/28/23 02:25	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/28/23 02:25	1
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	160		50.0	mg/Kg			11/27/23 17:54	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/22/23 14:59	11/27/23 17:54	
								1
	160		50.0	mg/Kg		11/22/23 14:59	11/27/23 17:54	
C10-C28)		П						1
C10-C28)	<b>160</b> <50.0	U	50.0 50.0	mg/Kg mg/Kg		11/22/23 14:59 11/22/23 14:59	11/27/23 17:54 11/27/23 17:54	1
C10-C28) OII Range Organics (Over C28-C36)								1 1 1 1 Dil Fac
Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0		50.0			11/22/23 14:59	11/27/23 17:54	1 Dil Fac
C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<50.0		50.0 <i>Limits</i>			11/22/23 14:59  Prepared	11/27/23 17:54  Analyzed	1 Dil Fac
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane o-Terphenyl	<50.0 **Recovery 80 75	Qualifier	50.0  Limits  70 - 130  70 - 130			11/22/23 14:59  Prepared  11/22/23 14:59	11/27/23 17:54  Analyzed  11/27/23 17:54	1
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0  **Recovery  80  75  Chromatograp	Qualifier	50.0  Limits  70 - 130  70 - 130		<u>D</u>	11/22/23 14:59  Prepared  11/22/23 14:59	11/27/23 17:54  Analyzed  11/27/23 17:54	1 1 <i>Dil Fac</i>

**Client Sample ID: FS02** 

Date Collected: 11/16/23 10:30 Date Received: 11/17/23 09:31

Date Received: 11/11/20

Sample Depth: - 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:50	11/28/23 02:51	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:50	11/28/23 02:51	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:50	11/28/23 02:51	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		11/21/23 16:50	11/28/23 02:51	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:50	11/28/23 02:51	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		11/21/23 16:50	11/28/23 02:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/21/23 16:50	11/28/23 02:51	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-5652-2

Released to Imaging: 3/26/2024 3:19:52 PM

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**Matrix: Solid** 

# **Client Sample Results**

Client: Ensolum Job ID: 890-5652-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: FS02** Lab Sample ID: 890-5652-2

Date Collected: 11/16/23 10:30 Matrix: Solid Date Received: 11/17/23 09:31

Sample Depth: - 5

Method: SW846 8021B -	<ul> <li>Volatile Organic</li> </ul>	Compounds (	GC) (Continued)
-----------------------	--------------------------------------	-------------	-----------------

Surrogate	%Recovery Qualifi	er Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	127	70 - 130	11/21/23 16:50	11/28/23 02:51	1

Method: TAI	SOP Total BTEX - Total BTEX Calculation

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404 U	0.00404	mg/Kg			11/28/23 02:51	1

Method: SW846 8015 NM	- Diesal Range	Organice	(DRO)	(CC)	ï
MICHICA. STACTO CO 12 IAIN	- Diesei Kange	Organics	(DIXO)	$\mathbf{U}$	,

Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8 L	U	49.8	mg/Kg			11/27/23 18:15	1

Method: SW846 8015B NM - Diesel Range Organics	(DRO)	(GC)	١
motified. Offerto College Ithin Biodol Rungo Organico	(5.10)	, , , , ,	,

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		11/22/23 14:59	11/27/23 18:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/22/23 14:59	11/27/23 18:15	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/22/23 14:59	11/27/23 18:15	1
Surrogate	%Pecovery	Qualifier	l imite			Propared	Analyzod	Dil Fac

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78	70 - 13	11/22/23 14:59	11/27/23 18:15	1
o-Terphenyl	75	70 - 13	11/22/23 14:59	11/27/23 18:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.5		5.02	mg/Kg			11/22/23 05:53	1

Client Sample ID: SW01 Lab Sample ID: 890-5652-3

Date Collected: 11/16/23 10:55 Date Received: 11/17/23 09:31

Sample Depth: - 0-5

Method: SW846 8021B -	M-1-4!1- O	0 (00)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00201	U	0.00201	mg/Kg		11/21/23 16:50	11/28/23 03:17	1	
Toluene	<0.00201	U	0.00201	mg/Kg		11/21/23 16:50	11/28/23 03:17	1	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/21/23 16:50	11/28/23 03:17	1	
m-Xylene & p-Xylene	0.0126		0.00402	mg/Kg		11/21/23 16:50	11/28/23 03:17	1	
o-Xylene	0.0404		0.00201	mg/Kg		11/21/23 16:50	11/28/23 03:17	1	
Xylenes, Total	0.0530		0.00402	mg/Kg		11/21/23 16:50	11/28/23 03:17	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)			70 - 130			11/21/23 16:50	11/28/23 03:17	1	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	11/21/23 16:50	11/28/23 03:17	1
1.4-Difluorobenzene (Surr)	81		70 - 130	11/21/23 16:50	0 11/28/23 03:17	1

### **Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0530		0.00402	mg/Kg			11/28/23 03:17	1

Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	739		49.7	mg/Kg			11/27/23 18:34	1

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Matrix: Solid

Job ID: 890-5652-1 SDG: 03C1558289

Project/Site: Outrider CVB

**Client Sample ID: SW01** Lab Sample ID: 890-5652-3 Date Collected: 11/16/23 10:55 Matrix: Solid Date Received: 11/17/23 09:31

Sample Depth: - 0-5

Client: Ensolum

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	83.2		49.7	mg/Kg		11/22/23 14:59	11/27/23 18:34	1
Diesel Range Organics (Over C10-C28)	598		49.7	mg/Kg		11/22/23 14:59	11/27/23 18:34	1
Oll Range Organics (Over C28-C36)	57.8		49.7	mg/Kg		11/22/23 14:59	11/27/23 18:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130			11/22/23 14:59	11/27/23 18:34	1
o-Terphenyl	74		70 - 130			11/22/23 14:59	11/27/23 18:34	1
Method: EPA 300.0 - Anions, Ic	on Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: SW02 Lab Sample ID: 890-5652-4

Date Collected: 11/16/23 12:50 Matrix: Solid

Date Received: 11/17/23 09:31

Sample Depth: - 0-5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 03:42	
Toluene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 03:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 03:42	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/21/23 16:50	11/28/23 03:42	1
o-Xylene	0.177		0.00200	mg/Kg		11/21/23 16:50	11/28/23 03:42	1
Xylenes, Total	0.177		0.00401	mg/Kg		11/21/23 16:50	11/28/23 03:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			11/21/23 16:50	11/28/23 03:42	1
1,4-Difluorobenzene (Surr)	106		70 - 130			11/21/23 16:50	11/28/23 03:42	1
- Method: TAL SOP Total BTEX -	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.177		0.00401	mg/Kg			11/28/23 03:42	1
-								
Method: SW846 8015 NM - Dies	sel Range Organ	ics (DRO) (	GC)					
Method: SW846 8015 NM - Dies Analyte	•	ics (DRO) ( Qualifier	GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
	•		•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/27/23 18:55	Dil Fac
Analyte	Result 762	Qualifier	<b>RL</b> 50.0		<u>D</u>	Prepared		
Analyte Total TPH	Result 762 esel Range Orga	Qualifier	<b>RL</b> 50.0		D D	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Did Analyte Gasoline Range Organics	Result 762 esel Range Orga	Qualifier nics (DRO)	RL 50.0	mg/Kg		<u> </u>	11/27/23 18:55	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Did Analyte	Result 762 esel Range Orga	Qualifier nics (DRO)	RL	mg/Kg		Prepared	11/27/23 18:55 Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Did Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 762 esel Range Orga Result 76.8 619	Qualifier nics (DRO)	RL 50.0 (GC) RL 50.0 50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 14:59 11/22/23 14:59	11/27/23 18:55  Analyzed  11/27/23 18:55  11/27/23 18:55	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Did Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 762 esel Range Orga Result 76.8	Qualifier nics (DRO)	RL 50.0 (GC) RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 11/22/23 14:59	11/27/23 18:55  Analyzed  11/27/23 18:55	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Did Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	Result 762 esel Range Orga Result 76.8 619	Qualifier nics (DRO)	RL 50.0 (GC) RL 50.0 50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 14:59 11/22/23 14:59	11/27/23 18:55  Analyzed  11/27/23 18:55  11/27/23 18:55	

# **Client Sample Results**

Client: Ensolum Job ID: 890-5652-1
Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: SW02 Lab Sample ID: 890-5652-4

Date Collected: 11/16/23 12:50

Matrix: Solid

Date Received: 11/17/23 09:31

Sample Depth: - 0-5

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

Surrogate	%Recovery Qualit	fier Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	75	70 - 130	11/22/23 14:59	11/27/23 18:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	28.0	5.01	ma/Ka			11/22/23 06:16	1

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14

# **Surrogate Summary**

Client: Ensolum Job ID: 890-5652-1
Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-5652-1	FS01	111	92	
890-5652-1 MS	FS01	116	89	
890-5652-1 MSD	FS01	114	98	
890-5652-2	FS02	114	127	
890-5652-3	SW01	110	81	
890-5652-4	SW02	118	106	
LCS 880-67587/1-A	Lab Control Sample	116	124	
LCSD 880-67587/2-A	Lab Control Sample Dup	130	136 S1+	
MB 880-67587/5-A	Method Blank	55 S1-	91	
MB 880-67694/5-A	Method Blank	54 S1-	82	

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
₋ab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-5652-1	FS01	80	75	
390-5652-2	FS02	78	75	
390-5652-3	SW01	79	74	
390-5652-4	SW02	80	75	
890-5667-A-1-C MS	Matrix Spike	78	68 S1-	
890-5667-A-1-D MSD	Matrix Spike Duplicate	80	68 S1-	
CS 880-67649/2-A	Lab Control Sample	107	114	
CSD 880-67649/3-A	Lab Control Sample Dup	128	130	
MB 880-67649/1-A	Method Blank	98	99	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-5652-1
Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67587/5-A

Matrix: Solid Analysis Batch: 67689 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67587

	MB	мв						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/21/23 16:50	11/28/23 02:00	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	55	S1-	70 - 130	11/21/23 16:50	11/28/23 02:00	1
1.4-Difluorobenzene (Surr)	91		70 - 130	11/21/23 16:50	11/28/23 02:00	1

Lab Sample ID: LCS 880-67587/1-A

Matrix: Solid

Analysis Batch: 67689

Client Sample ID: Lab Control Sample

Prop Batch: 67587

Prep Batch: 67587

	<b>Spike</b>	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08664		mg/Kg		87	70 - 130	
Toluene	0.100	0.09013		mg/Kg		90	70 - 130	
Ethylbenzene	0.100	0.08909		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1706		mg/Kg		85	70 - 130	
o-Xylene	0.100	0.08496		mg/Kg		85	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	116	70 - 130
1,4-Difluorobenzene (Surr)	124	70 - 130

Lab Sample ID: LCSD 880-67587/2-A

Matrix: Solid

Analysis Batch: 67689

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

Prep Type: Total/NA Prep Batch: 67587

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09164		mg/Kg		92	70 - 130	6	35
Toluene	0.100	0.09886		mg/Kg		99	70 - 130	9	35
Ethylbenzene	0.100	0.1003		mg/Kg		100	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1950		mg/Kg		97	70 - 130	13	35
o-Xylene	0.100	0.09616		mg/Kg		96	70 - 130	12	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	130		70 - 130
1.4-Difluorobenzene (Surr)	136	S1+	70 - 130

Lab Sample ID: 890-5652-1 MS

Matrix: Solid

Analysis Batch: 67689

Client Sample ID: FS01
Prep Type: Total/NA

Prep Batch: 67587

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1	0.0996	0.07634		mg/Kg		76	70 - 130	
Toluene	< 0.00199	U F1	0.0996	0.07498		mg/Kg		75	70 - 130	

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### QC Sample Results

Client: Ensolum Job ID: 890-5652-1 Project/Site: Outrider CVB SDG: 03C1558289

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

Lab Sample ID: 890-5652-1 MS

**Matrix: Solid Analysis Batch: 67689** 

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U F1	0.0996	0.06207	F1	mg/Kg		62	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1307	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00199	U F1	0.0996	0.07267		mg/Kg		73	70 - 130	
	Analyte Ethylbenzene m-Xylene & p-Xylene	Analyte         Result           Ethylbenzene         <0.00199	Analyte         Result Publisher         Qualifier Publisher           Ethylbenzene         <0.00199	Sample         Sample         Spike           Analyte         Result         Qualifier         Added           Ethylbenzene         <0.00199	Sample         Sample         Spike         MS           Analyte         Result         Qualifier         Added         Result           Ethylbenzene         <0.00199	Sample Analyte         Sample Result Ethylbenzene         Sample Qualifier Added Nesult Park         MS Added Result Qualifier Added Nesult Park         Qualifier No.0996         No.06207 Park         F1 No.0996         No.06207 Park         F1 No.0996         No.0907 Park         F1 No.0996         No.0996         No.0997 Park         No.0997 Park <td>Sample Analyte         Result Result Ethylbenzene         &lt; 0.00199         UF1         0.0996         0.0307         F1         mg/Kg           m-Xylene &amp; p-Xylene         &lt; 0.00398</td> UF1         0.199         0.1307         F1         mg/Kg	Sample Analyte         Result Result Ethylbenzene         < 0.00199         UF1         0.0996         0.0307         F1         mg/Kg           m-Xylene & p-Xylene         < 0.00398	Sample Analyte         Sample Result Ethylbenzene         Co.00199 (0.00398)         UF1         O.0996 (0.199)         MS         MS <t< td=""><td>Sample Analyte         Sample Result Ethylbenzene         Co.00199 Co.00398         UF1         Spike Added Added Result 0.0996         MS         MS         Unit Ms         D         %Rec           Ethylbenzene         &lt;0.00199 UF1</td>         0.0996         0.06207 F1         mg/Kg         562           m-Xylene &amp; p-Xylene         &lt;0.00398 UF1</t<>	Sample Analyte         Sample Result Ethylbenzene         Co.00199 Co.00398         UF1         Spike Added Added Result 0.0996         MS         MS         Unit Ms         D         %Rec           Ethylbenzene         <0.00199 UF1	Sample Analyte         Sample Result Qualifier         Spike Added Added Result Ethylbenzene         MS MS         Unit         D MRC         MRC           Ethylbenzene M-Xylene & p-Xylene         <0.00199

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: 890-5652-1 MSD

**Matrix: Solid** 

**Analysis Batch: 67689** 

**Client Sample ID: FS01** Prep Type: Total/NA Prep Batch: 67587

**Client Sample ID: FS01** 

Prep Type: Total/NA

Prep Batch: 67587

Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Analyte Unit 0.100 Benzene <0.00199 UF1 0.06395 F1 mg/Kg 63 70 - 130 18 35 0.100 70 - 130 Toluene <0.00199 UF1 0.06776 F1 mg/Kg 68 10 35 Ethylbenzene <0.00199 UF1 0.100 0.05547 F1 mg/Kg 55 70 - 130 11 35 0.200 0.1169 F1 58 70 - 130 35 m-Xylene & p-Xylene <0.00398 UF1 mg/Kg 11 0.100 <0.00199 U F1 0.06470 F1 65 70 - 130 12 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: MB 880-67694/5-A

**Matrix: Solid** 

Analysis Batch: 67689

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

Prep Batch: 67694

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/27/23 09:14	11/27/23 12:32	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	54	S1-	70 - 130	11/27/23 09:14	11/27/23 12:32	1
1,4-Difluorobenzene (Surr)	82		70 - 130	11/27/23 09:14	11/27/23 12:32	1

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

Lab Sample ID: MB 880-67649/1-A

**Matrix: Solid** 

Analysis Batch: 67686

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

Prep Batch: 67649

мв мв Result Qualifier RL Unit Prepared Gasoline Range Organics <50.0 U 50.0 mg/Kg 11/22/23 14:59 11/27/23 07:57

(GRO)-C6-C10

Client: Ensolum Job ID: 890-5652-1
Project/Site: Outrider CVB SDG: 03C1558289

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

Lab Sample ID: MB 880-67649/1-A

Matrix: Solid

Analysis Batch: 67686

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67649

	14.10						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U	50.0	mg/Kg		11/22/23 14:59	11/27/23 07:57	1
<50.0	U	50.0	mg/Kg		11/22/23 14:59	11/27/23 07:57	1
МВ	MB						
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
98		70 - 130			11/22/23 14:59	11/27/23 07:57	1
99		70 - 130			11/22/23 14:59	11/27/23 07:57	1
	Result	98	Result   Qualifier   RL	Result         Qualifier         RL         Unit           <50.0	Result   Qualifier   RL   Unit   D   mg/Kg	Result         Qualifier         RL         Unit         D         Prepared           <50.0	Result         Qualifier         RL         Unit         D         Prepared         Analyzed           <50.0

Lab Sample ID: LCS 880-67649/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 67649 Analysis Batch: 67686 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 989.1 99 70 - 130 mg/Kg (GRO)-C6-C10 1000 1050 105 Diesel Range Organics (Over mg/Kg 70 - 130 C10-C28) LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 107

Lab Sample ID: LCSD 880-67649/3-A

Matrix: Solid

Analysis Batch: 67686

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 67649

70 - 130

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1189		mg/Kg		119	70 - 130	18	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1248		mg/Kg		125	70 - 130	17	20
C10-C28)									

	LUSD LUS	SD
Surrogate	%Recovery Qua	alifier Limits
1-Chlorooctane	128	70 - 130
o-Terphenyl	130	70 - 130

114

Lab Sample ID: 890-5667-A-1-C MS

Client Sample ID: Matrix Spike
Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 67686 Prep Batch: 67649

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	1010	763.8		mg/Kg		72	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.2	U	1010	749.5		mg/Kg		71	70 - 130	

Diesel Range Organics (Over	<50.2 U	1010	749.5	mg/Kg	71	70 - 130
C10-C28)						
	MS MS					
Surrogate	%Recovery Qualific	er Limits				
1-Chlorooctane	78	70 - 130				
o-Terphenyl	68 S1-	70 - 130				

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o-Terphenyl

Job ID: 890-5652-1 Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

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

Lab Sample ID: 890-5667-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Prep Type: Total/NA Analysis Batch: 67686 Prep Batch: 67649

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.2	U	1010	788.4		mg/Kg		75	70 - 130	3	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.2	U	1010	767.2		mg/Kg		73	70 - 130	2	20
C10 C28)											

Limits

MSD MSD Surrogate %Recovery Qualifier 1-Chlorooctane 80

70 - 130 o-Terphenyl 68 S1-70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67439/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 67621** 

MB MB

Result Qualifier RL Unit Analyte Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 11/22/23 05:03

Lab Sample ID: LCS 880-67439/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 67621** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 242.4 90 - 110 mg/Kg 97

Lab Sample ID: LCSD 880-67439/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 67621

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	245.2		mg/Kg		98	90 - 110	1	20	

Lab Sample ID: 820-10978-A-21-D MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 67621** 

Sample Sample Spike MS MS %Rec Qualifier Added Qualifier Analyte Result Result %Rec Limits Unit Chloride 248 100 90 - 110 14.4 261.8 mg/Kg

Lab Sample ID: 820-10978-A-21-E MSD

**Matrix: Solid** 

Analysis Batch: 67621

Sample Sample Spike MSD MSD %Rec RPD Qualifier Added Result Result Qualifier %Rec Limits RPD Limit Analyte Unit D 248 101 Chloride 14.4 263.9 90 - 110 mg/Kg

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

Client Sample ID: Matrix Spike Duplicate

### QC Sample Results

Client: Ensolum Job ID: 890-5652-1 Project/Site: Outrider CVB SDG: 03C1558289

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-67443/1-A

Client Sample ID: Method Blank

**Prep Type: Soluble** 

Analysis Batch: 67629

**Matrix: Solid** 

MB MB

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 11/22/23 11:08

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-67443/2-A **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 67629** Spike LCS LCS %Rec

Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 260.9 mg/Kg 104 90 - 110

Lab Sample ID: LCSD 880-67443/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 67629

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 261.7 105 mg/Kg 90 - 110

Lab Sample ID: 820-10990-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 67629** 

MS MS Sample Sample Spike %Rec Analyte Qualifier Added Qualifier %Rec Result Result Unit Limits Chloride 259 248 503.2 90 - 110 mg/Kg

Lab Sample ID: 820-10990-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 67629

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 248 Chloride 259 505.1 mg/Kg 99 90 - 110 0 20

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

Client: Ensolum

Job ID: 890-5652-1 Project/Site: Outrider CVB SDG: 03C1558289

**GC VOA** 

Prep Batch: 67587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-1	FS01	Total/NA	Solid	5035	
890-5652-2	FS02	Total/NA	Solid	5035	
890-5652-3	SW01	Total/NA	Solid	5035	
890-5652-4	SW02	Total/NA	Solid	5035	
MB 880-67587/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67587/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67587/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5652-1 MS	FS01	Total/NA	Solid	5035	
890-5652-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 67689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-1	FS01	Total/NA	Solid	8021B	67587
890-5652-2	FS02	Total/NA	Solid	8021B	67587
890-5652-3	SW01	Total/NA	Solid	8021B	67587
890-5652-4	SW02	Total/NA	Solid	8021B	67587
MB 880-67587/5-A	Method Blank	Total/NA	Solid	8021B	67587
MB 880-67694/5-A	Method Blank	Total/NA	Solid	8021B	67694
LCS 880-67587/1-A	Lab Control Sample	Total/NA	Solid	8021B	67587
LCSD 880-67587/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67587
890-5652-1 MS	FS01	Total/NA	Solid	8021B	67587
890-5652-1 MSD	FS01	Total/NA	Solid	8021B	67587

Prep Batch: 67694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67694/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 67871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-1	FS01	Total/NA	Solid	Total BTEX	
890-5652-2	FS02	Total/NA	Solid	Total BTEX	
890-5652-3	SW01	Total/NA	Solid	Total BTEX	
890-5652-4	SW02	Total/NA	Solid	Total BTEX	

**GC Semi VOA** 

Prep Batch: 67649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-1	FS01	Total/NA	Solid	8015NM Prep	
890-5652-2	FS02	Total/NA	Solid	8015NM Prep	
890-5652-3	SW01	Total/NA	Solid	8015NM Prep	
890-5652-4	SW02	Total/NA	Solid	8015NM Prep	
MB 880-67649/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67649/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67649/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5667-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5667-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 67686

$\vdash$					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-1	FS01	Total/NA	Solid	8015B NM	67649

Client: Ensolum Job ID: 890-5652-1 Project/Site: Outrider CVB SDG: 03C1558289

GC Semi VOA (Continued)

### Analysis Batch: 67686 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-2	FS02	Total/NA	Solid	8015B NM	67649
890-5652-3	SW01	Total/NA	Solid	8015B NM	67649
890-5652-4	SW02	Total/NA	Solid	8015B NM	67649
MB 880-67649/1-A	Method Blank	Total/NA	Solid	8015B NM	67649
LCS 880-67649/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67649
LCSD 880-67649/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67649
890-5667-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	67649
890-5667-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67649

### Analysis Batch: 67824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-1	FS01	Total/NA	Solid	8015 NM	
890-5652-2	FS02	Total/NA	Solid	8015 NM	
890-5652-3	SW01	Total/NA	Solid	8015 NM	
890-5652-4	SW02	Total/NA	Solid	8015 NM	

### HPLC/IC

### Leach Batch: 67439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-1	FS01	Soluble	Solid	DI Leach	
890-5652-2	FS02	Soluble	Solid	DI Leach	
890-5652-3	SW01	Soluble	Solid	DI Leach	
890-5652-4	SW02	Soluble	Solid	DI Leach	
MB 880-67439/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67439/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67439/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-10978-A-21-D MS	Matrix Spike	Soluble	Solid	DI Leach	
820-10978-A-21-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### Leach Batch: 67443

Lab Sample ID MB 880-67443/1-A	Client Sample ID  Method Blank	Prep Type Soluble	Matrix Solid	Method  DI Leach	Prep Batch
LCS 880-67443/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67443/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-10990-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
820-10990-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### Analysis Batch: 67621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5652-1	FS01	Soluble	Solid	300.0	67439
890-5652-2	FS02	Soluble	Solid	300.0	67439
890-5652-3	SW01	Soluble	Solid	300.0	67439
890-5652-4	SW02	Soluble	Solid	300.0	67439
MB 880-67439/1-A	Method Blank	Soluble	Solid	300.0	67439
LCS 880-67439/2-A	Lab Control Sample	Soluble	Solid	300.0	67439
LCSD 880-67439/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67439
820-10978-A-21-D MS	Matrix Spike	Soluble	Solid	300.0	67439
820-10978-A-21-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	67439

Client: Ensolum Job ID: 890-5652-1
Project/Site: Outrider CVB SDG: 03C1558289

HPLC/IC

Analysis Batch: 67629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67443/1-A	Method Blank	Soluble	Solid	300.0	67443
LCS 880-67443/2-A	Lab Control Sample	Soluble	Solid	300.0	67443
LCSD 880-67443/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67443
820-10990-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	67443
820-10990-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	67443

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Job ID: 890-5652-1 SDG: 03C1558289

**Client Sample ID: FS01** 

Project/Site: Outrider CVB

Client: Ensolum

Lab Sample ID: 890-5652-1

Matrix: Solid

Date Collected: 11/16/23 10:25 Date Received: 11/17/23 09:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	67587	11/21/23 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67689	11/28/23 02:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67871	11/28/23 02:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			67824	11/27/23 17:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	67649	11/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/27/23 17:54	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 05:48	SMC	EET MID

**Client Sample ID: FS02** Lab Sample ID: 890-5652-2 Matrix: Solid

Date Collected: 11/16/23 10:30

Date Received: 11/17/23 09:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	67587	11/21/23 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67689	11/28/23 02:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67871	11/28/23 02:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			67824	11/27/23 18:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	67649	11/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/27/23 18:15	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 05:53	SMC	EET MID

**Client Sample ID: SW01** Lab Sample ID: 890-5652-3 Date Collected: 11/16/23 10:55 **Matrix: Solid** 

Date Received: 11/17/23 09:31

	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	67587	11/21/23 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67689	11/28/23 03:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67871	11/28/23 03:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			67824	11/27/23 18:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	67649	11/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/27/23 18:34	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 06:10	SMC	EET MID

**Client Sample ID: SW02** Lab Sample ID: 890-5652-4

Date Collected: 11/16/23 12:50 Date Received: 11/17/23 09:31

	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	67587	11/21/23 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67689	11/28/23 03:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67871	11/28/23 03:42	SM	EET MID

**Eurofins Carlsbad** 

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**Matrix: Solid** 

### **Lab Chronicle**

Client: Ensolum Job ID: 890-5652-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: SW02** Lab Sample ID: 890-5652-4

Matrix: Solid

Date Collected: 11/16/23 12:50 Date Received: 11/17/23 09:31

	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			67824	11/27/23 18:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	67649	11/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67686	11/27/23 18:55	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 06:16	SMC	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: 890-5652-1
Project/Site: Outrider CVB SDG: 03C1558289

### **Laboratory: Eurofins Midland**

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
• .	are included in this report, bu	it the laboratory is not certif	ied by the governing authority. This lis	t may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

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# **Method Summary**

Client: Ensolum Job ID: 890-5652-1
Project/Site: Outrider CVB SDG: 03C1558289

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	EPA	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

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

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

**Eurofins Carlsbad** 

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# **Sample Summary**

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5652-1

SDG: 03C1558289

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5652-1	FS01	Solid	11/16/23 10:25	11/17/23 09:31	- 5
890-5652-2	FS02	Solid	11/16/23 10:30	11/17/23 09:31	- 5
890-5652-3	SW01	Solid	11/16/23 10:55	11/17/23 09:31	- 0-5
890-5652-4	SW02	Solid	11/16/23 12:50	11/17/23 09:31	- 0-5



**Environment Testing** 

Xenco

# **Chain of Custody**

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432)

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300		
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Work Orde	r No: _
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296		

								Hobi	os, NM (	575) 392	-7550,	Carlsbad	, NM (575	5) 988-31	99		wv	/w.xenco.c	com	Page	of	
Project Manager:	Ber	Belil	1				Bill to: (ii	differe	nt)	G	ar	ett	- G	ire	20			Work Orde	er Com	ments		
Company Name:	7	15010		1/	0		Compan			YT	0	E		cal		Progran	n: UST/PST	PRP	Brown	fields RR	C Supe	rfund 🗌
Address:	312	2Nat	ion	Alper	125	Hwy	Address:			5	04	K	(51	ces	est		Project:					
City, State ZIP:	Cor	1shap					City, Stat	e ZIP:		Ca	4	-00			8220				PST	PST/UST TRRP Level IV		
Phone:	CKBC.	1-854	1-0	85	)	Email:	BBE	2/:11	0	en	50	Um	.co	m		Deliver	ables: EDD		ADaPT	☐ Othe	er:	
Project Name:	00	rido	CCI	VB.		Turn	Around							F	NALYSIS REQU	JEST				Preserva	tive Codes	
Project Number:	030	1559	3 28	39		Routine	Rush	1	Pres. Code										N	lone: NO	DI Wate	r: H₂O
Project Location:	32	8507	4-1	53.6	789	Due Date:					T					1 1	1	1 1	C	ool: Cool	MeOH: M	Лe
Sampler's Name:	Sa	wah	wel	Van	ei	TAT starts the														CL: HC	HNO 3: H	
PO #:					J	the lab, if rece	eived by 4:	30pm	ی											<sub>2</sub> S0 <sub>4</sub> : H <sub>2</sub>	NaOH: N	a
SAMPLE RECEIPT		Temp Bl	ank:	Yes 1	No	Wet Ice:	Yes	No	neters											3PO 4: HP	15	
Samples Received In			Vo	Thermo			INN	100	Param Param		8				890-5652 C	hain of Cu	ıstody			aHSO 4: NAB a 2S 2O3: NaS		
Cooler Custody Seals			N/A	Correct			3.6	ja	-		3			1	1 1	1 1	1 1	1 1		n Acetate+N		
Sample Custody Sea Total Containers:	Is:	Yes No	N/A			Reading:	3.2	2	-	1	1	1 +									ic Acid: SAPC	
Total containers.				Dat		Time		Grab/	# of	-	计	19								C	<u></u>	
Sample Iden	tification		Matrix	Sampl		Sampled	_Depth_	Comp		U	K	1								Sample	Comments	
FSOI			5	1116	23	10:25	51	C	14	×	1	1 1							C		ente	
FS02				1		10:30	51		1	1	1							+	V	036	51001	
5001						10:55	0-5				11	1				1		-	J	cold	ent #	7
SW02						0.50	0-5'		11	11	11			_				ntr	40 9	13500	5112-	1
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Total 200.7 / 60		200.8 / 60		ارسما	8F										Cu Fe Pb Mo Mn Mo Ni					7470 / 747		
Circle Method(s)										_								.00172	.5.177			
Notice: Signature of this do of service. Eurofins Xenco	will be liabl	e only for the c	ost of same	oles and sh	all not	assume any respo	nsibility for a	ny losses	or expe	nses incu	rred by 1	he client i	f such loss	es are due	to circumstances be	eyond the cont	rol					
of Eurofins Xenco. A minin	num charge	of \$85.00 will l	be applied	to each pr	oject a	nd a charge of \$5	for each sam	ple subn	nitted to	Eurofins 1	(enco, b	ut not an	lyzed. The	se terms v	will be enforced unle	ss previously n	egotiated.					

Received by: (Signature) Date/Time Relinquished by: (Signature) Relinquished by: (Signature) Received by: (Signature)\_ Date/Time Revised Date: 08/25/2020 Rev. 2020.2











Received by OCD: 1/19/2024 2:31:29 PM

Released to Imaging: 3/26/2024 3:19:52 PM

11/28/2023

### **Eurofins Carlsbad**

Phone: 575-988-3199 Fax: 575-988-3199

1089 N Canal St. Carlsbad NM 88220

# **Chain of Custody Record**



💸 eurofins

**Environment Testing** 

	Sampler <sup>.</sup>	Sampler Lab PN										Carrier Tracking No(s)					COC No		
Client Information (Sub Contract Lab)			·	Kram	er Je	ssica	l										890-1826 1		
Shipping/Receiving	Phone:				ca Kra								of Origin Mexico	)			Page: Page 1 of 1		
Company: Eurofins Environment Testing South Centr					Accredi			red (Se	e note	e):		·		***************************************			Job#		
Address	Due Date Requeste				NELA	P - T	exas										890-5652-1		
1211 W Florida Ave, ,	11/27/2023	su .		l					Ana	ılysi	s Red	equested					Preservation Code	s M Hexane	
City:	TAT Requested (da	rys)								Ť	T	П			T	7	A HCL B NaOH	N None	
Midland State Zip				1						ļ						- Autorita	C Zn Acetate	O AsNaO2 P Na2O4S	
TX, 79701				ones.		표												Q Na2SO3	
Phone:	PO#:					Ē												R Na2S2O3 S H2SO4	
432-704-5440(Tel) Email					<u> </u>	8		ğ							}		H Ascorbic Acid	T TSP Dodecahydrate U Acetone	
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Project Name <sup>-</sup>	Project#:					F.	1 1	ž	Ē		- 1					Je L	K EDTA	W pH 4-5 Y - Trizma	
outrider cub	89000093							Ě	₽ 							Itai		Z other (specify)	
Site <sup>-</sup>	SSOW#-			Field Filtered Sample ( Perform MS/MSD (Yes	8015MOD_NM/8015NM_		300_ORGFM_28D/DI_LEACH Chloride	8021B/6036FP_Calc (MOD) BTEX	_						io3 jc	Other <sup>.</sup>	:		
			Samula N	atrix	8 8	Į. E	읉	-78	בַ   נ	Total_BTEX_GCV						ě			
			Type (v	rwater	활물	Ŕ	8015MOD_Calo	SE	98 1	Ĕ						를			
		Sample	(C=Comp, o=	=solid, vaste/oil,	휘	<u>§</u>	2W	Ö	Ja .	-						É			
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) <sub>BT=TI</sub>			Įξ	8	စ္က	80	ĕ						ĕ	Special Ins	tructions/Note:	
		> <	Preservation	Code:	$\times\!$			roant ar					-100,		Cultimoral Control	$\mathbb{X}$			
FS01 (890-5652-1)	11/16/23	10 25 Mountain		Solid		х	х	х	х	х						1			
FS02 (890-5652-2)	11/16/23	10 30 Mountain		Solid		х	х	х	х	х						1		***************************************	
SW01 (890-5652-3)	11/16/23	10 55 Mountain		Solid		х	х	х	х	x						1			
SW02 (890-5652-4)	11/16/23	12 50 Mountain		Solid		х	х	х	х	х						1			
																7			
		i														9/100			
Note Since laboratory accreditations are subject to change, Eurofins Environmen	Testing South Centr	al LLC places	the ownership of me	thod, analy	vte & ac	ccredit	ation c	ompliar	ice up	on our	subcont	ract lab	oratorie:	This s	ample sh	iomeni	t is forwarded under cha	in-of-custody. If the	
laboratory does not currently maintain accreditation in the State of Origin listed ab accreditation status should be brought to Eurofins Environment Testing South Cei	ove for analysis/tests	/matrix being a	inalizzed the sample	s must he s	shinned	1 hack	to the l	Furntin	e Envi	mnma	nt Taetin	a South	Cantral	II C lah	noratoni c	or other	r ineta ctione will be pro-	ided Amirehannes to	
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Custody Seals Intact. Custody Seal No	]	****				Cool	er Tem	peratu	re(s) °	C and	Other Re	marke							
Δ Yes Δ No						1	.5. (611	.po.a.u	(0)	Janu	ouror ret	mains.							

11/28/2023

# **Login Sample Receipt Checklist**

 Client: Ensolum
 Job Number: 890-5652-1

 SDG Number: 03C1558289

Login Number: 5652 List Source: Eurofins Carlsbad

List Number: 1

Creator: Lopez, Abraham

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

120 OJ 220

# **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-5652-1 SDG Number: 03C1558289

List Source: Eurofins Midland

List Creation: 11/20/23 10:41 AM

Login Number: 5652 List Number: 2 Creator: Kramer, Jessica

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

Released to Imaging: 3/26/2024 3:19:52 PM

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**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Ben Belill

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 11/29/2023 10:04:27 AM

# **JOB DESCRIPTION**

Outrider CVB 03C1558289

# **JOB NUMBER**

890-5654-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

# **Eurofins Carlsbad**

## **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

# **Authorization**

Generated 11/29/2023 10:04:27 AM

Authorized for release by Jessica Kramer, Project Manager <u>Jessica.Kramer@et.eurofinsus.com</u> (432)704-5440 Client: Ensolum
Project/Site: Outrider CVB
Laboratory Job ID: 890-5654-1
SDG: 03C1558289

# **Table of Contents**

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### **Definitions/Glossary**

Job ID: 890-5654-1 Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

#### **Qualifiers**

**GC VOA** 

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. S1+ Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

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

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description** 

U Indicates the analyte was analyzed for but not detected.

### **Glossary**

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

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

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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac Dilution Factor

Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

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

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

Relative Error Ratio (Radiochemistry) **RER** 

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

**TNTC** Too Numerous To Count

#### Case Narrative

Client: Ensolum

Job ID: 890-5654-1 Project/Site: Outrider CVB

SDG: 03C1558289

Job ID: 890-5654-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-5654-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 11/17/2023 9:31 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: PH 04 (890-5654-1), PH 04 (890-5654-2), PH 04 (890-5654-3), PH 04 (890-5654-4) and PH 04 (890-5654-5).

#### **GC VOA**

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-67586 and analytical batch 880-67691 was outside the upper control limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67586 and analytical batch 880-67691 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

#### GC Semi VOA

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-67650 and analytical batch 880-67805 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

#### HPLC/IC

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

**Eurofins Carlsbad** 11/29/2023

Matrix: Solid

Lab Sample ID: 890-5654-1

# **Client Sample Results**

Client: Ensolum Job ID: 890-5654-1
Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: PH 04

Date Collected: 11/16/23 13:20 Date Received: 11/17/23 09:31

Sample Depth: 1'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 17:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 17:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 17:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/22/23 17:00	11/27/23 17:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 17:57	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/22/23 17:00	11/27/23 17:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			11/22/23 17:00	11/27/23 17:57	1
1,4-Difluorobenzene (Surr)	107		70 - 130			11/22/23 17:00	11/27/23 17:57	1
- Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/27/23 17:57	1
Method: SW846 8015 NM - Diese	ol Bango Organ	ice (DBO) (	20)					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/28/23 13:48	Dil Fac
Analyte Total TPH	Result   <50.3	Qualifier U			<u>D</u>	Prepared		
Analyte	Result <50.3	Qualifier U			<u>D</u>	Prepared Prepared		
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <50.3	Qualifier Unics (DRO) Qualifier	RL 50.3	mg/Kg			11/28/23 13:48	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.3  sel Range Orga Result	Qualifier U  nics (DRO) Qualifier U	RL	mg/Kg		Prepared	11/28/23 13:48 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies	Result sel Range Orga Result 	Qualifier U  nics (DRO) Qualifier U	RL 50.3 (GC) RL 50.3	mg/Kg  Unit  mg/Kg		Prepared 11/22/23 15:02	11/28/23 13:48  Analyzed  11/28/23 13:48	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U  nics (DRO) Qualifier U  U	RL 50.3 (GC) RL 50.3 50.3	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 15:02 11/22/23 15:02	11/28/23 13:48  Analyzed  11/28/23 13:48  11/28/23 13:48	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U  nics (DRO) Qualifier U  U	RL 50.3 (GC) RL 50.3 50.3	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 15:02 11/22/23 15:02 11/22/23 15:02	Analyzed 11/28/23 13:48  Analyzed 11/28/23 13:48 11/28/23 13:48	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U  nics (DRO) Qualifier U  U	RL 50.3  (GC)  RL 50.3  50.3  50.3 <i>Limits</i>	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 15:02 11/22/23 15:02 11/22/23 15:02 Prepared	Analyzed 11/28/23 13:48  Analyzed 11/28/23 13:48 11/28/23 13:48  Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier U  nics (DRO) Qualifier U  U  Qualifier	RL 50.3  (GC)  RL 50.3  50.3  50.3  Limits  70 - 130  70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 15:02 11/22/23 15:02 11/22/23 15:02 Prepared 11/22/23 15:02	Analyzed 11/28/23 13:48  Analyzed 11/28/23 13:48  11/28/23 13:48  Analyzed 11/28/23 13:48	1 Dil Fac 1 1 1 Dil Fac 2 1
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U  nics (DRO) Qualifier U  U  Qualifier	RL 50.3  (GC)  RL 50.3  50.3  50.3  Limits  70 - 130  70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/22/23 15:02 11/22/23 15:02 11/22/23 15:02 Prepared 11/22/23 15:02	Analyzed 11/28/23 13:48  Analyzed 11/28/23 13:48  11/28/23 13:48  Analyzed 11/28/23 13:48	1 Dil Fac 1

Client Sample ID: PH 04

Date Collected: 11/16/23 13:25 Date Received: 11/17/23 09:31

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		11/22/23 17:00	11/27/23 18:18	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/22/23 17:00	11/27/23 18:18	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/22/23 17:00	11/27/23 18:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/22/23 17:00	11/27/23 18:18	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/22/23 17:00	11/27/23 18:18	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/22/23 17:00	11/27/23 18:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			11/22/23 17:00	11/27/23 18:18	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-5654-2

**Matrix: Solid** 

Matrix: Solid

Lab Sample ID: 890-5654-2

Job ID: 890-5654-1

Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: PH 04

Date Collected: 11/16/23 13:25 Date Received: 11/17/23 09:31

Sample Depth: 2'

Method: SW846 8021B	- Volatile Organic	Compounds	(GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	113	70 - 130	11/22/23 17:00	11/27/23 18:18	1

Method: TAI	SOP Total BTEX	- Total BTFX	Calculation
Mictilou. IAL	- OOI TOTAL DIEA	- IOIGI DIEA	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/27/23 18:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			11/28/23 14:10	1

Method: SW846 8015B	NM - Diesel Rand	ne Organics	(DRO)	(GC)
Method. 344040 00 13D	IAIM - DIESEL IZALI	ge Organics	(DICO)	(90)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		11/22/23 15:02	11/28/23 14:10	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		11/22/23 15:02	11/28/23 14:10	1
Oll Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		11/22/23 15:02	11/28/23 14:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80	70 - 130	11/22/23 15:02	11/28/23 14:10	1
o-Terphenyl	73	70 - 130	11/22/23 15:02	11/28/23 14:10	1

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96	mg/Kg			11/22/23 06:38	1

Client Sample ID: PH 04 Lab Sample ID: 890-5654-3 Matrix: Solid

Date Collected: 11/16/23 13:30 Date Received: 11/17/23 09:31

Sample Depth: 3'

Method: SW846 8021B -	M-1-4!1- O	0 (00)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 18:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 18:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 18:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/22/23 17:00	11/27/23 18:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 18:38	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/22/23 17:00	11/27/23 18:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			11/22/23 17:00	11/27/23 18:38	1
1 1 Differenchemanne (Crem)	110		70 400			44/00/00 47:00	44/07/00 40:00	

4-Bromofluorobenzene (Surr)	97	70 - 130	11/22/23 17:00 11/27/23 18:38 1	
1,4-Difluorobenzene (Surr)	113	70 - 130	11/22/23 17:00 11/27/23 18:38 1	

### **Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/27/23 18:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/28/23 14:33	1

Matrix: Solid

Lab Sample ID: 890-5654-3

11/22/23 06:55

Client: Ensolum Job ID: 890-5654-1 Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: PH 04

Date Collected: 11/16/23 13:30 Date Received: 11/17/23 09:31

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		11/22/23 15:02	11/28/23 14:33	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/22/23 15:02	11/28/23 14:33	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/22/23 15:02	11/28/23 14:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130			11/22/23 15:02	11/28/23 14:33	1
o-Terphenyl	74		70 - 130			11/22/23 15:02	11/28/23 14:33	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: PH 04 Lab Sample ID: 890-5654-4 Date Collected: 11/16/23 13:35 Matrix: Solid

5.02

mg/Kg

<5.02 U

Date Received: 11/17/23 09:31

Sample Depth: 4'

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/22/23 17:00	11/27/23 18:59	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/22/23 17:00	11/27/23 18:59	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/22/23 17:00	11/27/23 18:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/22/23 17:00	11/27/23 18:59	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/22/23 17:00	11/27/23 18:59	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/22/23 17:00	11/27/23 18:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			11/22/23 17:00	11/27/23 18:59	1
1,4-Difluorobenzene (Surr)	109		70 - 130			11/22/23 17:00	11/27/23 18:59	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/27/23 18:59	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/28/23 15:20	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/22/23 15:02	11/28/23 15:20	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/22/23 15:02	11/28/23 15:20	1
Oll Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/22/23 15:02	11/28/23 15:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130			11/22/23 15:02	11/28/23 15:20	1
o-Terphenyl	77		70 - 130			11/22/23 15:02	11/28/23 15:20	1

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11/29/2023

Job ID: 890-5654-1

Matrix: Solid

Lab Sample ID: 890-5654-4

Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: PH 04

Date Collected: 11/16/23 13:35 Date Received: 11/17/23 09:31

Sample Depth: 4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble												
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac				
Chloride	<5.01	U	5.01	mg/Kg			11/22/23 07:01	1				

Client Sample ID: PH 04 Lab Sample ID: 890-5654-5 Matrix: Solid

Date Collected: 11/16/23 13:40 Date Received: 11/17/23 09:31

Sample Depth: 5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		11/22/23 17:00	11/27/23 19:19	
Toluene	< 0.00199	U	0.00199	mg/Kg		11/22/23 17:00	11/27/23 19:19	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/22/23 17:00	11/27/23 19:19	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/22/23 17:00	11/27/23 19:19	
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/22/23 17:00	11/27/23 19:19	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/22/23 17:00	11/27/23 19:19	•
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	94		70 - 130			11/22/23 17:00	11/27/23 19:19	1
1,4-Difluorobenzene (Surr)	114		70 - 130			11/22/23 17:00	11/27/23 19:19	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/27/23 19:19	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (	GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/28/23 15:58	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/22/23 15:02	11/28/23 15:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/22/23 15:02	11/28/23 15:58	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/22/23 15:02	11/28/23 15:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130			11/22/23 15:02	11/28/23 15:58	1
o-Terphenyl	78		70 - 130			11/22/23 15:02	11/28/23 15:58	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	е					
Method: EPA 300.0 - Anions, Ion Analyte	• •	hy - Solubl Qualifier	e RL	Unit	D	Prepared	Analyzed	Dil Fac

# **Surrogate Summary**

Client: Ensolum Job ID: 890-5654-1
Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-5649-A-1-B MS	Matrix Spike	106	85	
890-5649-A-1-C MSD	Matrix Spike Duplicate	90	99	
890-5654-1	PH 04	92	107	
890-5654-2	PH 04	97	113	
890-5654-3	PH 04	97	113	
890-5654-4	PH 04	103	109	
890-5654-5	PH 04	94	114	
LCS 880-67586/1-A	Lab Control Sample	99	96	
LCSD 880-67586/2-A	Lab Control Sample Dup	94	107	
MB 880-67586/5-A	Method Blank	98	144 S1+	

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-5649-A-1-F MS	Matrix Spike	93	72	
890-5649-A-1-G MSD	Matrix Spike Duplicate	105	79	
890-5654-1	PH 04	80	74	
390-5654-2	PH 04	80	73	
390-5654-3	PH 04	79	74	
890-5654-4	PH 04	81	77	
390-5654-5	PH 04	81	78	
LCS 880-67650/2-A	Lab Control Sample	121	125	
LCSD 880-67650/3-A	Lab Control Sample Dup	97	99	
MB 880-67650/1-A	Method Blank	104	106	

**Surrogate Legend** 

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-5654-1 Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67586/5-A

Lab Sample ID: LCS 880-67586/1-A

**Matrix: Solid** Analysis Batch: 67691 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67586

	MB	мв						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 11:54	•
Toluene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 11:54	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 11:54	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/22/23 17:00	11/27/23 11:54	
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/22/23 17:00	11/27/23 11:54	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/22/23 17:00	11/27/23 11:54	

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98	70 - 130	11/22/23 17:00	11/27/23 11:54	1
1,4-Difluorobenzene (Surr)	144 S1+	70 - 130	11/22/23 17:00	11/27/23 11:54	1

**Client Sample ID: Lab Control Sample** 

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 67691 Prep Batch: 67586

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits 0.100 0.08717 mg/Kg 87 70 - 130

Benzene Toluene 0.100 0.09063 mg/Kg 91 70 - 130 0.100 Ethylbenzene 0.08672 mg/Kg 87 70 - 130 0.200 105 70 - 130 m-Xylene & p-Xylene 0.2109 mg/Kg 0.100 o-Xylene 0.1033 mg/Kg 103 70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

Lab Sample ID: LCSD 880-67586/2-A

**Matrix: Solid** 

Analysis Batch: 67691

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67586

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit 0.09477 Benzene 0.100 mg/Kg 95 70 - 130 8 35 Toluene 0.100 0.08743 mg/Kg 87 70 - 130 35 Ethylbenzene 0.100 0.08464 mg/Kg 85 70 - 130 35 2 m-Xylene & p-Xylene 0.200 0.1930 mg/Kg 96 70 - 130 35 0.100 0.09338 o-Xylene mg/Kg 93 70 - 130 10 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1.4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-5649-A-1-B MS

**Matrix: Solid** 

Analysis Batch: 67691

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

Prep Batch: 67586

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0998	0.07451		mg/Kg	_	75	70 - 130	
Toluene	0.00652	F1	0.0998	0.07145	F1	mg/Kg		65	70 - 130	

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### QC Sample Results

Job ID: 890-5654-1 Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

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

Lab Sample ID: 890-5649-A-1-B MS

Lab Sample ID: 890-5649-A-1-C MSD

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 67691

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 67586

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene 0.0150 F1 0.0998 0.09961 85 70 - 130 mg/Kg 0.276 F1 m-Xylene & p-Xylene 0.200 0.3536 F1 mg/Kg 39 70 - 130 0.0998 o-Xylene 0.111 F1 0.1338 F1 23 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 67586

RPD

Analysis Batch: 67691 Sample Sample Spike MSD MSD Result Qualifier Result Qualifier %Rec RPD Limit Analyte babbA Limits Unit Benzene <0.00200 U 0.0990 0.08737 mg/Kg 88 70 - 130 16 35 Toluene 0.00652 F1 0.0990 0.06412 F1 mg/Kg 58 70 - 130 11 35 Ethylbenzene 0.0150 F1 0.0990 0.07849 F1 64 70 - 130 35 mg/Kg 24 0.198 m-Xylene & p-Xylene 0.276 F1 0.2876 F1 mg/Kg 6 70 - 130 21 35 0.111 F1 0.0990 0.1040 F1 -7 70 - 130 25 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

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

Lab Sample ID: MB 880-67650/1-A

**Matrix: Solid** 

**Analysis Batch: 67805** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67650

MB MB Result Qualifier RL Unit D Prepared Analyzed Dil Fac Analyte 50.0 <50.0 U 11/22/23 15:02 11/28/23 07:40 Gasoline Range Organics mg/Kg (GRO)-C6-C10 11/22/23 15:02 11/28/23 07:40 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 11/22/23 15:02 11/28/23 07:40 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	11/22/23 15:	02 11/28/23 07:40	1
o-Terphenyl	106		70 - 130	11/22/23 15:	02 11/28/23 07:40	1

Lab Sample ID: LCS 880-67650/2-A

**Matrix: Solid** 

**Analysis Batch: 67805** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 67650

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1019		mg/Kg		102	70 - 130	 
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1056		mg/Kg		106	70 - 130	
C10-C28)								

Client: Ensolum Job ID: 890-5654-1 Project/Site: Outrider CVB

SDG: 03C1558289

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

Lab Sample ID: LCS 880-67650/2-A

**Matrix: Solid** 

Analysis Batch: 67805

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

Prep Batch: 67650

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 121 70 - 130 o-Terphenyl 125 70 - 130

Lab Sample ID: LCSD 880-67650/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Analysis Batch: 67805

Prep Type: Total/NA

Prep Batch: 67650

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 951.5 95 70 - 130 7 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 985.1 99 20 mg/Kg 70 - 130C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-5649-A-1-F MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 67805** 

Prep Type: Total/NA

Prep Batch: 67650

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	263	F2	991	1022		mg/Kg		77	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	2120	F1	991	2513	F1	mg/Kg		40	70 - 130	
C10-C28)										

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 93 o-Terphenyl 72 70 - 130

Lab Sample ID: 890-5649-A-1-G MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** 

Analysis Batch: 67805

Prep Type: Total/NA

Prep Batch: 67650

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	263	F2	991	1537	F2	mg/Kg		128	70 - 130	40	20
(GRO)-C6-C10											
Diesel Range Organics (Over	2120	F1	991	2788	F1	mg/Kg		68	70 - 130	10	20
C10-C28)											

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	105	70 - 130
o-Terphenyl	79	70 - 130

Dil Fac

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: PH 04
Prep Type: Soluble

Client Sample ID: PH 04

**Prep Type: Soluble** 

### **QC Sample Results**

Client: Ensolum Job ID: 890-5654-1
Project/Site: Outrider CVB SDG: 03C1558289

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67439/1-A

Matrix: Solid

Analysis Batch: 67621

MB MB

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed

 Chloride
 <5.00</td>
 U
 5.00
 mg/Kg
 11/22/23 05:03

Lab Sample ID: LCS 880-67439/2-A

Matrix: Solid

Analysis Batch: 67621

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 242.4 mg/Kg 97 90 - 110

Lab Sample ID: LCSD 880-67439/3-A

Matrix: Solid

Analysis Batch: 67621

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 245.2 mg/Kg 90 - 110

Lab Sample ID: 890-5654-2 MS

Matrix: Solid

Analysis Batch: 67621

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride <4.96 248 251.4 100 90 - 110 mg/Kg

Lab Sample ID: 890-5654-2 MSD

**Matrix: Solid** 

Analysis Batch: 67621

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride U 248 <4.96 251.2 mg/Kg 100 90 - 110 0 20

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Client: Ensolum Job ID: 890-5654-1 Project/Site: Outrider CVB SDG: 03C1558289

**GC VOA** 

Prep Batch: 67586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5654-1	PH 04	Total/NA	Solid	5035	
890-5654-2	PH 04	Total/NA	Solid	5035	
890-5654-3	PH 04	Total/NA	Solid	5035	
890-5654-4	PH 04	Total/NA	Solid	5035	
890-5654-5	PH 04	Total/NA	Solid	5035	
MB 880-67586/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67586/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67586/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5649-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-5649-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 67691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5654-1	PH 04	Total/NA	Solid	8021B	67586
890-5654-2	PH 04	Total/NA	Solid	8021B	67586
890-5654-3	PH 04	Total/NA	Solid	8021B	67586
890-5654-4	PH 04	Total/NA	Solid	8021B	67586
890-5654-5	PH 04	Total/NA	Solid	8021B	67586
MB 880-67586/5-A	Method Blank	Total/NA	Solid	8021B	67586
LCS 880-67586/1-A	Lab Control Sample	Total/NA	Solid	8021B	67586
LCSD 880-67586/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67586
890-5649-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	67586
890-5649-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67586

Analysis Batch: 67851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-5654-1	PH 04	Total/NA	Solid	Total BTEX	
890-5654-2	PH 04	Total/NA	Solid	Total BTEX	
890-5654-3	PH 04	Total/NA	Solid	Total BTEX	
890-5654-4	PH 04	Total/NA	Solid	Total BTEX	
890-5654-5	PH 04	Total/NA	Solid	Total BTEX	

**GC Semi VOA** 

Prep Batch: 67650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5654-1	PH 04	Total/NA	Solid	8015NM Prep	
890-5654-2	PH 04	Total/NA	Solid	8015NM Prep	
890-5654-3	PH 04	Total/NA	Solid	8015NM Prep	
890-5654-4	PH 04	Total/NA	Solid	8015NM Prep	
890-5654-5	PH 04	Total/NA	Solid	8015NM Prep	
MB 880-67650/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67650/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67650/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5649-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5649-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 67805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5654-1	PH 04	Total/NA	Solid	8015B NM	67650
890-5654-2	PH 04	Total/NA	Solid	8015B NM	67650

## **QC Association Summary**

Client: Ensolum
Project/Site: Outrider CVB
Job ID: 890-5654-1
SDG: 03C1558289

### GC Semi VOA (Continued)

### **Analysis Batch: 67805 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5654-3	PH 04	Total/NA	Solid	8015B NM	67650
890-5654-4	PH 04	Total/NA	Solid	8015B NM	67650
890-5654-5	PH 04	Total/NA	Solid	8015B NM	67650
MB 880-67650/1-A	Method Blank	Total/NA	Solid	8015B NM	67650
LCS 880-67650/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67650
LCSD 880-67650/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67650
890-5649-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	67650
890-5649-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67650

### Analysis Batch: 67905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5654-1	PH 04	Total/NA	Solid	8015 NM	
890-5654-2	PH 04	Total/NA	Solid	8015 NM	
890-5654-3	PH 04	Total/NA	Solid	8015 NM	
890-5654-4	PH 04	Total/NA	Solid	8015 NM	
890-5654-5	PH 04	Total/NA	Solid	8015 NM	

### HPLC/IC

#### Leach Batch: 67439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5654-1	PH 04	Soluble	Solid	DI Leach	
890-5654-2	PH 04	Soluble	Solid	DI Leach	
890-5654-3	PH 04	Soluble	Solid	DI Leach	
890-5654-4	PH 04	Soluble	Solid	DI Leach	
890-5654-5	PH 04	Soluble	Solid	DI Leach	
MB 880-67439/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67439/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67439/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5654-2 MS	PH 04	Soluble	Solid	DI Leach	
890-5654-2 MSD	PH 04	Soluble	Solid	DI Leach	

#### Analysis Batch: 67621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5654-1	PH 04	Soluble	Solid	300.0	67439
890-5654-2	PH 04	Soluble	Solid	300.0	67439
890-5654-3	PH 04	Soluble	Solid	300.0	67439
890-5654-4	PH 04	Soluble	Solid	300.0	67439
890-5654-5	PH 04	Soluble	Solid	300.0	67439
MB 880-67439/1-A	Method Blank	Soluble	Solid	300.0	67439
LCS 880-67439/2-A	Lab Control Sample	Soluble	Solid	300.0	67439
LCSD 880-67439/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67439
890-5654-2 MS	PH 04	Soluble	Solid	300.0	67439
890-5654-2 MSD	PH 04	Soluble	Solid	300.0	67439

**Eurofins Carlsbad** 

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SDG: 03C1558289

Project/Site: Outrider CVB Client Sample ID: PH 04

Date Collected: 11/16/23 13:20 Date Received: 11/17/23 09:31

Client: Ensolum

Lab Sample ID: 890-5654-1 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			4.99 g	5 mL	67586	11/22/23 17:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/27/23 17:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67851	11/27/23 17:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			67905	11/28/23 13:48	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	67650	11/22/23 15:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67805	11/28/23 13:48	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 06:33	SMC	EET MID

Lab Sample ID: 890-5654-2

Client Sample ID: PH 04 Date Collected: 11/16/23 13:25 Matrix: Solid

Date Received: 11/17/23 09:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	67586	11/22/23 17:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/27/23 18:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67851	11/27/23 18:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			67905	11/28/23 14:10	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	67650	11/22/23 15:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67805	11/28/23 14:10	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 06:38	SMC	EET MID

Client Sample ID: PH 04 Lab Sample ID: 890-5654-3

Date Collected: 11/16/23 13:30 **Matrix: Solid** Date Received: 11/17/23 09:31

	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	67586	11/22/23 17:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/27/23 18:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67851	11/27/23 18:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			67905	11/28/23 14:33	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	67650	11/22/23 15:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67805	11/28/23 14:33	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 06:55	SMC	EET MID

Client Sample ID: PH 04 Lab Sample ID: 890-5654-4

Date Collected: 11/16/23 13:35 **Matrix: Solid** Date Received: 11/17/23 09:31

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	67586	11/22/23 17:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/27/23 18:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67851	11/27/23 18:59	SM	EET MID

**Eurofins Carlsbad** 

11/29/2023

Client: Ensolum Job ID: 890-5654-1
Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: PH 04 Lab Sample ID: 890-5654-4

Date Collected: 11/16/23 13:35

Date Received: 11/17/23 09:31

Matrix: Solid

	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			67905	11/28/23 15:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67650	11/22/23 15:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67805	11/28/23 15:20	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 07:01	SMC	EET MID

Client Sample ID: PH 04 Lab Sample ID: 890-5654-5

Date Collected: 11/16/23 13:40 Matrix: Solid
Date Received: 11/17/23 09:31

	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	67586	11/22/23 17:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67691	11/27/23 19:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67851	11/27/23 19:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			67905	11/28/23 15:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	67650	11/22/23 15:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67805	11/28/23 15:58	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 07:18	SMC	EET MID

Laboratory References:

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

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## **Accreditation/Certification Summary**

Client: Ensolum Job ID: 890-5654-1
Project/Site: Outrider CVB SDG: 03C1558289

### **Laboratory: Eurofins Midland**

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELAI	)	T104704400-23-26	06-30-24
The following analytes	are included in this report, bu	t the laboratory is not certif	ried by the governing authority. This lis	t mav include analyte
for which the agency d	oes not offer certification.		, gg,	,,
for which the agency d Analysis Method		Matrix	Analyte	,
,	oes not offer certification.	•	, , ,	

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### **Method Summary**

Client: Ensolum Job ID: 890-5654-1 Project/Site: Outrider CVB SDG: 03C1558289

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	EPA	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

EPA = US Environmental Protection Agency

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: Outrider CVB

Job ID: 890-5654-1

SDG: 03C1558289

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5654-1	PH 04	Solid	11/16/23 13:20	11/17/23 09:31	1'
890-5654-2	PH 04	Solid	11/16/23 13:25	11/17/23 09:31	2'
890-5654-3	PH 04	Solid	11/16/23 13:30	11/17/23 09:31	3'
890-5654-4	PH 04	Solid	11/16/23 13:35	11/17/23 09:31	4'
890-5654-5	PH 04	Solid	11/16/23 13:40	11/17/23 09:31	5'

Received by OCD: 1/19/2024 2:31:29 PM



**Environment Testing** Xenco

## Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296

Work Order No:

Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 Page www.xenco.com **Work Order Comments** Bill to: (if different) Project Manager: UST/PST PRP Brownfields RRC Fuspium LLC Superfund Company Name: Program: Company Name: 22 National Porks HullAddress: State of Project: Address: Stad IVIM 88220 City, State ZIP: Reporting: Level II 🔲 Level III 🔲 PST/UST 🗍 TRRP 🔲 Level IV 🦳 coristad win 88220 City, State ZIP: EDD 🗌 Email: BBell Bensoum. com Deliverables: ADaPT Other: Phone: **Preservative Codes ANALYSIS REQUEST** Turn Around Project Name: Pres. Routine Rush None: NO DI Water: H<sub>2</sub>O Project Number: 32.185074-105 67866 Due Date: Cool: Cool MeOH: Me Project Location: HCL: HC HNO 3: HN Sorah Welland TAT starts the day received by Sampler's Name: the lab, if received by 4:30pm H<sub>2</sub>SO<sub>4</sub>: H<sub>2</sub> NaOH: Na PO #: H<sub>3</sub>PO<sub>4</sub>: HP Yes No Yes No Wet Ice: SAMPLE RECEIPT Temp Blank: NaHSO 4: NABIS Samples Received Intact: Thermometer ID: Na 2S 2O3: NaSO Yes No N/A Correction Factor: Cooler Custody Seals: Zn Acetate+NaOH: Zn Yes No Temperature Reading: Sample Custody Seals: NaOH+Ascorbic Acid: SAPC 01 古 Corrected Temperature: **Total Containers:** Grab/ Time Sample Comments Matrix Sample Identification Cont Sampled Sampled Comp X X 3 OHOL pHou 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Tl Sn U V Zn Total 200.7 / 6010 200.8 / 6020: Hg: 1631 / 245.1 / 7470 / 7471 TCLP/SPLP6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Circle Method(s) and Metal(s) to be analyzed totice: 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 Relinquished by: (Signature) Received by: (Signature) Date/Time Date/Time Relinquished by: (Signature) eceived by: (Signature)







Revised Date: 08/25/2020 Rev. 2020.2

1089 N Canal St.

Carlsbad, NM 88220

Phone 575-988-3199 Fax 575-988-3199

Eurofins Carlsbad

## **Chain of Custody Record**



💸 eurofins

**Environment Testing** 

11/29/2023

Page 23 of 25

Released to Imaging: 3/26/2024 3:19:52 PM

Client Information (Sub Contract Lab)	Sampler Lab Kra					Carrier Tra Jessica									COC No: 890-1828 1							
Dient Contact: Shipping/Receiving	Phone:			E-Mai			State of Origin:				of Origin: Page:											
Company:				Jess			ramer@et.eurofinsus.com New Mexico ditations Required (See note)				Mexico Page 1 of 1											
Eurofins Environment Testing South Centr						NELAP - Texas 890-5654-1																
Address 1211 W Florida Ave	Due Date Requeste 11/27/2023	ed			Analysis Requested Preservation Codes																	
Dity <sup>-</sup>	TAT Requested (da	ıys):				1	T			larys	13 1	equ	1	_	П		110-0		HCL NaOH		M Hexane N None	
Midland State Zip:						ď											.00	С	Zn Acetate		O - AsNaO2 P Na2O4S	
TX 79701						Ŧ										1		∯ E	Nitric Acid NaHSO4	(	Q Na2SO3 R Na2S2O3	
Phone 120.704.5440(T-1)	PO#:					Full TPH					1						11.00		MeOH Amchlor		S H2SO4	
432-704-5440(Tel) Email.	WO #:				<b> </b> 9	8		ride									5.	/ <b>3</b>	Ascorbic Ad		T TSP Dode U Acetone	ecahydrate
					5 9	Prep (MOD)		등	TEX		i							J	DI Water		V MCAA W pH4-5	
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			.,,,,,	V≕water S≕solid,	間	Į Q	ΔÖ	ORG	3/603	18							Total Num					
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	(C=comp, o= G=grab) <sub>BT=TI</sub>	waste/oil, ssue A≅Air)	Field Filt	30151	8016MOD	300	3021	Total				1			Ç		Speci	al Ine	tructions/	Note
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PH 04 (890-5654-1)	11/16/23	13 20 Mountain		Solid	П	х	Х	Х	х	х	Victoria Company		200.00							and days of the same	and the same of th	
PH 04 (890-5654-2)	11/16/23	13 25 Mountain		Solid	$\sqcap$	×	x	x	х	х		1	1				1	1	***************************************			
PH 04 (890-5654-3)	11/16/23	13 30 Mountain		Solid	ff	T <sub>x</sub>	x	x	Х	x	$\top$	$\neg$						1				
PH 04 (890-5654-4)	11/16/23	13 35 Mountain		Solid	Ħ	×	x	х	Х	х		1		_	1			1				
PH 04 (890-5654-5)	11/16/23	13 40 Mountain		Solid		×	x	х	х	х	$\neg$	1						1				
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lote <sup>.</sup> Since laboratory accreditations are subject to change Eurofins Environment aboratory does not currently maintain accreditation in the State of Origin listed ab accreditation status should be brought to Eurofins Environment Testing South Cer	ove for analysis/tests	/matrix being a	nalyzed the sample	es must be	shippe	ed back	c to the	Furof	ins Er	vironn	ent Te	stina S	South C	Central	LLC lat	borator	or oth	er ins	structions will	be prov	vided Anvict	hannes to
Possible Hazard Identification																			longer th			
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Deliverable Requested I II III IV Other (specify)	Primary Deliver	able Rank 2	2		s	pecia	Inst	ructio	ns/Q	C Re	quire											
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Custody Seals Intact: Custody Seal No						Co	oler Te	mpera	ture(s	) °C ar	d Othe	r Rem	arks								<u> </u>	
Δ Yes Δ No	***************************************					丄																
																					Ver 06/08	/2021

### **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-5654-1

SDG Number: 03C1558289

Login Number: 5654 List Source: Eurofins Carlsbad

List Number: 1

Creator: Bruns, Shannon

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

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### **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-5654-1 SDG Number: 03C1558289

Login Number: 5654
List Source: Eurofins Midland
List Number: 2
List Creation: 11/20/23 10:41 AM

Creator: Kramer, Jessica

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

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<6mm (1/4").

**Environment Testing** 

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Ben Belill Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 11/28/2023 12:48:27 PM

## **JOB DESCRIPTION**

Outrider CVB 03C1558289

## **JOB NUMBER**

890-5655-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



## **Eurofins Carlsbad**

### **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

### **Authorization**

Generated 11/28/2023 12:48:27 PM

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

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

Client: Ensolum
Project/Site: Outrider CVB
Laboratory Job ID: 890-5655-1
SDG: 03C1558289

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### **Definitions/Glossary**

Job ID: 890-5655-1 Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

#### **Qualifiers**

**GC VOA** 

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

**GC Semi VOA** 

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. S1+ Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected. U

HPLC/IC

Qualifier **Qualifier Description** U Indicates the analyte was analyzed for but not detected.

### **Glossary**

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

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

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

Decision Level 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** 

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

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TFO

**TNTC** Too Numerous To Count

#### Case Narrative

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5655-1

SDG: 03C1558289

Job ID: 890-5655-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-5655-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 11/17/2023 9:31 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C

#### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH03 (890-5655-1), PH03 (890-5655-2), PH03 (890-5655-3), PH03 (890-5655-4) and PH03 (890-5655-5).

#### GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-67587/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: PH03 (890-5655-1), PH03 (890-5655-3), (CCV 880-67689/33) and (LCSD 880-67587/2-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-67694/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67587 and analytical batch 880-67689 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-67700 and analytical batch 880-67682 was outside the upper control limits.

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: PH03 (890-5655-1), PH03 (890-5655-3), PH03 (890-5655-4), PH03 (890-5655-5), (890-5655-A-1-D MS) and (890-5655-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67700 and analytical batch 880-67682 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

### **Case Narrative**

Client: Ensolum Job ID: 890-5655-1
Project/Site: Outrider CVB SDG: 03C1558289

Job ID: 890-5655-1 (Continued)

**Laboratory: Eurofins Carlsbad (Continued)** 

HPLC/IC

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

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Matrix: Solid

Lab Sample ID: 890-5655-1

### **Client Sample Results**

Client: Ensolum Job ID: 890-5655-1
Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: PH03

Date Collected: 11/16/23 13:50 Date Received: 11/17/23 09:31

Sample Depth: 1'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		11/21/23 16:50	11/28/23 04:08	
Toluene	< 0.00199	U	0.00199	mg/Kg		11/21/23 16:50	11/28/23 04:08	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/21/23 16:50	11/28/23 04:08	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/21/23 16:50	11/28/23 04:08	
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/21/23 16:50	11/28/23 04:08	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/21/23 16:50	11/28/23 04:08	•
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130			11/21/23 16:50	11/28/23 04:08	
1,4-Difluorobenzene (Surr)	134	S1+	70 - 130			11/21/23 16:50	11/28/23 04:08	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/28/23 04:08	
Analyte Total TPH	<49.6	Qualifier U	49.6	mg/Kg	D	Prepared	Analyzed 11/27/23 10:51	Dil Fa
Total TPH	<49.6	U	49.6	mg/Kg			11/27/23 10:51	
							11/21/20 10:01	1
Method: SW846 8015B NM - Die	•		• •					
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10	•	Qualifier	• •	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared 11/27/23 09:32		
Analyte Gasoline Range Organics	Result	Qualifier U	RL		<u>D</u>		Analyzed	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result   <49.6	Qualifier U U F1	RL 49.6	mg/Kg	<u> </u>	11/27/23 09:32	Analyzed 11/27/23 10:51	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.6   <49.6	Qualifier U U F1	49.6 49.6	mg/Kg	<u>D</u>	11/27/23 09:32	Analyzed 11/27/23 10:51 11/27/23 10:51	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result  <49.6 <49.6 <49.6	Qualifier U U F1	RL 49.6 49.6 49.6	mg/Kg	<u>D</u>	11/27/23 09:32 11/27/23 09:32 11/27/23 09:32	Analyzed 11/27/23 10:51 11/27/23 10:51 11/27/23 10:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U U F1 U Qualifier	RL 49.6 49.6 49.6 <i>Limits</i>	mg/Kg	<u>D</u>	11/27/23 09:32 11/27/23 09:32 11/27/23 09:32 Prepared	Analyzed 11/27/23 10:51 11/27/23 10:51 11/27/23 10:51 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.6   <49.6   <49.6   <49.6     <49.6     <49.6     <49.6     <49.6     <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <49.6   <	Qualifier U U F1 U Qualifier S1+ S1+	RL 49.6 49.6 49.6 <b>Limits</b> 70 - 130 70 - 130	mg/Kg	<u>D</u>	11/27/23 09:32 11/27/23 09:32 11/27/23 09:32 Prepared 11/27/23 09:32	Analyzed 11/27/23 10:51 11/27/23 10:51 11/27/23 10:51  Analyzed 11/27/23 10:51	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U F1 U Qualifier S1+ S1+	RL 49.6 49.6 49.6 <b>Limits</b> 70 - 130 70 - 130	mg/Kg	<u>D</u>	11/27/23 09:32 11/27/23 09:32 11/27/23 09:32 Prepared 11/27/23 09:32	Analyzed 11/27/23 10:51 11/27/23 10:51 11/27/23 10:51  Analyzed 11/27/23 10:51	Dil Fac

**Client Sample ID: PH03** 

Date Collected: 11/16/23 13:55 Date Received: 11/17/23 09:31

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:50	11/28/23 04:34	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:50	11/28/23 04:34	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:50	11/28/23 04:34	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		11/21/23 16:50	11/28/23 04:34	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:50	11/28/23 04:34	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		11/21/23 16:50	11/28/23 04:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/21/23 16:50	11/28/23 04:34	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-5655-2

**Matrix: Solid** 

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Matrix: Solid

Lab Sample ID: 890-5655-2

Job ID: 890-5655-1

Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH03** 

Date Collected: 11/16/23 13:55 Date Received: 11/17/23 09:31

Sample Depth: 2'

Method: SW846 8021B	- Volatile Organic	Compounds (	(GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	87	70 - 130	11/21/23 16:50	11/28/23 04:34	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			11/28/23 04:34	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/27/23 11:56	1

Method: SW846 8015B NM - Diesel Range Organics	(DRO)	(GC)	١
motified. Offerto College Ithin Biodol Rungo Organico	(5.10)	, , , , ,	,

	- 10001 1 1111 90 0 19 1110 (- 110 ) (0 0 )							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/27/23 09:32	11/27/23 11:56	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/27/23 09:32	11/27/23 11:56	1
Oll Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/27/23 09:32	11/27/23 11:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	128	70 - 130	11/27/23 09:3	2 11/27/23 11:56	1
o-Terphenyl	108	70 - 130	11/27/23 09:3	2 11/27/23 11:56	1

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95	mg/Kg			11/22/23 07:29	1

**Client Sample ID: PH03** Lab Sample ID: 890-5655-3 Matrix: Solid

Date Collected: 11/16/23 14:00 Date Received: 11/17/23 09:31

Sample Depth: 3'

Mothodi CIMOAC 0004D	Valatila Organia Campaunda //	CCI

method: SW846 8021B - volatile Organic Compounds (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 04:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 04:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 04:59	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/21/23 16:50	11/28/23 04:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 04:59	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/21/23 16:50	11/28/23 04:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130			11/21/23 16:50	11/28/23 04:59	1
1,4-Difluorobenzene (Surr)	115		70 - 130			11/21/23 16:50	11/28/23 04:59	1

Mothod: TAI	SOP Total RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	mg/Kg			11/28/23 04:59	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/27/23 12:18	1

Matrix: Solid

Lab Sample ID: 890-5655-3

Job ID: 890-5655-1

Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH03** 

Date Collected: 11/16/23 14:00 Date Received: 11/17/23 09:31

Sample Depth: 3'

Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/27/23 09:32	11/27/23 12:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/27/23 09:32	11/27/23 12:18	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/27/23 09:32	11/27/23 12:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	158	S1+	70 - 130			11/27/23 09:32	11/27/23 12:18	1
o-Terphenyl	137	S1+	70 - 130			11/27/23 09:32	11/27/23 12:18	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.02		5.02	mg/Kg			11/22/23 07:35	

**Client Sample ID: PH03** Lab Sample ID: 890-5655-4 Date Collected: 11/16/23 14:05 Matrix: Solid

Date Received: 11/17/23 09:31

Sample Depth: 4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:50	11/28/23 05:25	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:50	11/28/23 05:25	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:50	11/28/23 05:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/21/23 16:50	11/28/23 05:25	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/21/23 16:50	11/28/23 05:25	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/21/23 16:50	11/28/23 05:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			11/21/23 16:50	11/28/23 05:25	1
1,4-Difluorobenzene (Surr)	92		70 - 130			11/21/23 16:50	11/28/23 05:25	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	11	0.00000				11/28/23 05:25	1
IOIAI DTLA	10.00000	U	0.00396	mg/Kg			11/26/23 05:25	1
- -				mg/Kg			11/26/23 05.25	ı
: Method: SW846 8015 NM - Diese	el Range Organ			mg/Kg Unit	D	Prepared		Dil Fac
- -	el Range Organ	ics (DRO) (	GC)		<u>D</u>	Prepared	Analyzed 11/27/23 12:40	
Method: SW846 8015 NM - Diese Analyte Total TPH	Result <50.0	ics (DRO) ( Qualifier	GC)  RL  50.0	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result <50.0 sel Range Organ	ics (DRO) ( Qualifier	GC)  RL  50.0	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	el Range Organ Result <50.0 sel Range Organ	Qualifier Unics (DRO) Qualifier	GC)  RL  50.0	Unit mg/Kg			Analyzed 11/27/23 12:40	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result <50.0 sel Range Orga Result	Qualifier Unics (DRO) Qualifier	GC)  RL  50.0  (GC)  RL	Unit mg/Kg		Prepared	Analyzed 11/27/23 12:40 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	el Range Organ Result <50.0 sel Range Orga Result	ics (DRO) ( Qualifier U  nics (DRO) Qualifier U	GC)  RL  50.0  (GC)  RL	Unit mg/Kg		Prepared	Analyzed 11/27/23 12:40 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10	el Range Organ Result <50.0 sel Range Orga Result <50.0	ics (DRO) ( Qualifier U  nics (DRO) Qualifier U	GC)  RL  50.0  (GC)  RL  50.0	Unit mg/Kg  Unit mg/Kg		Prepared 11/27/23 09:32	Analyzed 11/27/23 12:40  Analyzed 11/27/23 12:40	Dil Fac  Dil Fac  1
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <50.0 sel Range Orga Result <50.0	ics (DRO) ( Qualifier U  nics (DRO) Qualifier U	GC)  RL  50.0  (GC)  RL  50.0	Unit mg/Kg  Unit mg/Kg		Prepared 11/27/23 09:32	Analyzed 11/27/23 12:40  Analyzed 11/27/23 12:40	Dil Fac  Dil Fac  1
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0	ics (DRO) ( Qualifier U  nics (DRO) Qualifier U  U	GC)  RL  50.0  (GC)  RL  50.0  50.0	Unit mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/27/23 09:32 11/27/23 09:32	Analyzed  11/27/23 12:40  Analyzed  11/27/23 12:40  11/27/23 12:40	Dil Fac  Dil Fac  1  1  1
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	el Range Organ Result <50.0  sel Range Orga Result <50.0 <50.0 <50.0	ics (DRO) ( Qualifier U  nics (DRO) Qualifier U  U	GC) RL 50.0  (GC) RL 50.0  50.0  50.0	Unit mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/27/23 09:32 11/27/23 09:32 11/27/23 09:32	Analyzed 11/27/23 12:40  Analyzed 11/27/23 12:40 11/27/23 12:40 11/27/23 12:40	Dil Fac  Dil Fac  1

Job ID: 890-5655-1

Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH03** Date Collected: 11/16/23 14:05

Lab Sample ID: 890-5655-4 Matrix: Solid Date Received: 11/17/23 09:31

Sample Depth: 4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	13.0		4.95	mg/Kg			11/22/23 07:40	1		

**Client Sample ID: PH03** Lab Sample ID: 890-5655-5

Date Collected: 11/16/23 14:10 Matrix: Solid

Date Received: 11/17/23 09:31

Sample Depth: 5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:50	11/28/23 05:50	
Toluene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:50	11/28/23 05:50	
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:50	11/28/23 05:50	
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/21/23 16:50	11/28/23 05:50	
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/21/23 16:50	11/28/23 05:50	
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/21/23 16:50	11/28/23 05:50	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130			11/21/23 16:50	11/28/23 05:50	
1,4-Difluorobenzene (Surr)	101		70 - 130			11/21/23 16:50	11/28/23 05:50	
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/28/23 05:50	
		ics (DRO) (	GC)	Unit	D	Prepared	Analyzed	Dil Fa
Method: SW846 8015 NM - Diese	Result	Qualifier	RL		<u>D</u>	Prepared		Dil Fa
		Qualifier		Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/27/23 13:02	Dil Fa
Analyte	Result   <49.6	Qualifier U	49.6		<u>D</u>	Prepared		Dil Fa
Analyte Total TPH	Result <49.6	Qualifier U	49.6		<u>D</u>	Prepared Prepared		
Analyte Total TPH  Method: SW846 8015B NM - Dies	Result <49.6	Qualifier Unics (DRO) Qualifier	RL 49.6 (GC)	mg/Kg			11/27/23 13:02	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.6  sel Range Orga Result	Qualifier U  nics (DRO) Qualifier U	RL 49.6 (GC)	mg/Kg		Prepared	11/27/23 13:02 Analyzed	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.6  sel Range Orga Result <49.6	Qualifier U  nics (DRO) Qualifier U	RL 49.6  (GC) RL 49.6	mg/Kg  Unit  mg/Kg		Prepared 11/27/23 09:32	11/27/23 13:02  Analyzed  11/27/23 13:02	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.6	Qualifier U  nics (DRO) Qualifier U  U	RL 49.6  (GC)  RL 49.6  49.6	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/27/23 09:32 11/27/23 09:32	Analyzed 11/27/23 13:02 11/27/23 13:02 11/27/23 13:02	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.6	Qualifier U  nics (DRO) Qualifier U  U  Qualifier	RL 49.6 (GC) RL 49.6 49.6	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/27/23 09:32 11/27/23 09:32 11/27/23 09:32	Analyzed 11/27/23 13:02  11/27/23 13:02 11/27/23 13:02 11/27/23 13:02	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.6	Qualifier U  nics (DRO) Qualifier U  U  Qualifier	RL 49.6 (GC) RL 49.6 49.6 49.6	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/27/23 09:32 11/27/23 09:32 11/27/23 09:32 Prepared	Analyzed 11/27/23 13:02  Analyzed 11/27/23 13:02 11/27/23 13:02 Analyzed	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.6	Qualifier U  nics (DRO) Qualifier U  U  Qualifier S1+	RL 49.6 (GC) RL 49.6 49.6 49.6 Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/27/23 09:32 11/27/23 09:32 11/27/23 09:32 Prepared 11/27/23 09:32	Analyzed 11/27/23 13:02  Analyzed 11/27/23 13:02  11/27/23 13:02  Analyzed 11/27/23 13:02	Dil Fa
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result   <49.6	Qualifier U  nics (DRO) Qualifier U  U  Qualifier S1+	RL 49.6 (GC) RL 49.6 49.6 49.6 Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 11/27/23 09:32 11/27/23 09:32 11/27/23 09:32 Prepared 11/27/23 09:32	Analyzed 11/27/23 13:02  Analyzed 11/27/23 13:02  11/27/23 13:02  Analyzed 11/27/23 13:02	Dil Fac

### **Surrogate Summary**

Client: Ensolum Job ID: 890-5655-1
Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-5652-A-1-C MS	Matrix Spike	116	89	
390-5652-A-1-D MSD	Matrix Spike Duplicate	114	98	
390-5655-1	PH03	117	134 S1+	
390-5655-2	PH03	119	87	
390-5655-3	PH03	141 S1+	115	
390-5655-4	PH03	92	92	
390-5655-5	PH03	101	101	
_CS 880-67587/1-A	Lab Control Sample	116	124	
_CSD 880-67587/2-A	Lab Control Sample Dup	130	136 S1+	
MB 880-67587/5-A	Method Blank	55 S1-	91	
MB 880-67694/5-A	Method Blank	54 S1-	82	
Surrogate Legend				

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

Matrix: Solid Prep Type: Total/NA

_			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-5655-1	PH03	188 S1+	164 S1+
890-5655-1 MS	PH03	153 S1+	111
890-5655-1 MSD	PH03	145 S1+	109
890-5655-2	PH03	128	108
890-5655-3	PH03	158 S1+	137 S1+
890-5655-4	PH03	131 S1+	111
890-5655-5	PH03	141 S1+	121
LCS 880-67700/2-A	Lab Control Sample	111	104
LCSD 880-67700/3-A	Lab Control Sample Dup	116	116
MB 880-67700/1-A	Method Blank	151 S1+	140 S1+

**Surrogate Legend** 

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-5655-1 SDG: 03C1558289 Project/Site: Outrider CVB

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67587/5-A

**Matrix: Solid** Analysis Batch: 67689 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67587

	МВ	мв						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/21/23 16:50	11/28/23 02:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/21/23 16:50	11/28/23 02:00	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	1	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	55	S1-	70 - 130	11/	21/23 16:50	11/28/23 02:00	1
1,4-Difluorobenzene (Surr)	91		70 - 130	11/	21/23 16:50	11/28/23 02:00	1

Lab Sample ID: LCS 880-67587/1-A

Matrix: Solid

Analysis Batch: 67689

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67587

	<b>Spike</b>	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08664		mg/Kg		87	70 - 130	
Toluene	0.100	0.09013		mg/Kg		90	70 - 130	
Ethylbenzene	0.100	0.08909		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1706		mg/Kg		85	70 - 130	
o-Xylene	0.100	0.08496		mg/Kg		85	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	116	70 - 130
1,4-Difluorobenzene (Surr)	124	70 - 130

Lab Sample ID: LCSD 880-67587/2-A

Matrix: Solid

Analysis Batch: 67689

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

Prep Type: Total/NA

Prep Batch: 67587

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09164		mg/Kg		92	70 - 130	6	35
Toluene	0.100	0.09886		mg/Kg		99	70 - 130	9	35
Ethylbenzene	0.100	0.1003		mg/Kg		100	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1950		mg/Kg		97	70 - 130	13	35
o-Xylene	0.100	0.09616		mg/Kg		96	70 - 130	12	35

LCSD LCSD

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	130	70 - 130
1,4-Difluorobenzene (Surr)	136 S1+	70 - 130

Lab Sample ID: 890-5652-A-1-C MS

**Matrix: Solid** 

Analysis Batch: 67689

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

Prep Batch: 67587

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1	0.0996	0.07634		mg/Kg		76	70 - 130	
Toluene	< 0.00199	U F1	0.0996	0.07498		mg/Kg		75	70 - 130	

**Eurofins Carlsbad** 

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### QC Sample Results

Job ID: 890-5655-1 Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

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

Lab Sample ID: 890-5652-A-1-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Solid** Analysis Batch: 67689

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene < 0.00199 U F1 0.0996 0.06207 F1 62 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00398 UF1 0.199 0.1307 F1 mg/Kg 66 70 - 130 0.0996 o-Xylene <0.00199 UF1 0.07267 73 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: 890-5652-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 67689

Prep Type: Total/NA

Prep Batch: 67587

Prep Batch: 67587

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.100 Benzene <0.00199 U F1 0.06395 F1 mg/Kg 63 70 - 130 18 35 Toluene <0.00199 U F1 0.100 0.06776 F1 mg/Kg 68 70 - 130 10 35 Ethylbenzene <0.00199 U F1 0.100 0.05547 F1 55 70 - 130 11 35 mg/Kg 0.200 0.1169 F1 70 - 130 m-Xylene & p-Xylene <0.00398 UF1 mg/Kg 58 11 35 0.100 <0.00199 U F1 0.06470 F1 65 70 - 130 o-Xylene mg/Kg 12

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: MB 880-67694/5-A Client Sample ID: Method Blank **Matrix: Solid** 

Analysis Batch: 67689

Prep Type: Total/NA Prep Batch: 67694

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/27/23 09:14	11/27/23 12:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/27/23 09:14	11/27/23 12:32	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	54	S1-	70 - 130	11/27/23 09:14	11/27/23 12:32	1
1,4-Difluorobenzene (Surr)	82		70 - 130	11/27/23 09:14	11/27/23 12:32	1

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

Lab Sample ID: MB 880-67700/1-A Client Sample ID: Method Blank

**Matrix: Solid** Analysis Batch: 67682

Prep Type: Total/NA Prep Batch: 67700 мв мв

Analyte Result Qualifier RL Unit Prepared <50.0 U 50.0 mg/Kg 11/27/23 08:00 11/27/23 08:18 Gasoline Range Organics

(GRO)-C6-C10

Client: Ensolum Project/Site: Outrider CVB

Job ID: 890-5655-1 SDG: 03C1558289

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

Lab Sample ID: MB 880-67700/1-A **Matrix: Solid** 

Analysis Batch: 67682

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

Prep Batch: 67700

Unit Prepared Analyzed Dil Fac

Analyte Result Qualifier RL <50.0 U 50.0 11/27/23 08:00 11/27/23 08:18 Diesel Range Organics (Over mg/Kg C10-C28) OII Range Organics (Over C28-C36) 50.0 11/27/23 08:00 11/27/23 08:18 <50.0 U mg/Kg

MB MB

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	151	S1+	70 - 130	11/27/23 08:00	11/27/23 08:18	1
l	o-Terphenyl	140	S1+	70 - 130	11/27/23 08:00	11/27/23 08:18	1

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCS 880-67700/2-A **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 67682 Prep Batch: 67700

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 1104 110 70 - 130 mg/Kg (GRO)-C6-C10 1000 1250 Diesel Range Organics (Over mg/Kg 125 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery (	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: LCSD 880-67700/3-A

**Matrix: Solid Analysis Batch: 67682**  Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67700

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	1077		mg/Kg		108	70 - 130	2	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1120		mg/Kg		112	70 - 130	11	20	
C10-C28)										

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

Lab Sample ID: 890-5655-1 MS

**Matrix: Solid** 

Analysis Batch: 67682

Client Sample ID: PH03 Prep Type: Total/NA

Prep Batch: 67700

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	1105		mg/Kg		109	70 - 130
Diesel Range Organics (Over	<49.6	U F1	1000	1537	F1	mg/Kg		152	70 - 130

C10-C28)

	IVIS	IVIS			
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	153	S1+	70 - 130		
o-Terphenyl	111		70 - 130		

Job ID: 890-5655-1

Client: Ensolum SDG: 03C1558289 Project/Site: Outrider CVB

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

Lab Sample ID: 890-5655-1 MSD	Client Sample ID: PH03
Matrix: Solid	Pren Type: Total/NA

**Analysis Batch: 67682** Prep Batch: 67700

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.6	U	1000	1087		mg/Kg		107	70 - 130	2	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.6	U F1	1000	1488	F1	mg/Kg		147	70 - 130	3	20
C10-C28)											

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	145	S1+	70 - 130
o-Terphenyl	109		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67439/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 67621

мв мв

Analyte	Result Que	alifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	5.00	mg/Kg			11/22/23 05:03	1

Lab Sample ID: LCS 880-67439/2-A **Client Sample ID: Lab Control Sample** Matrix: Solid **Prep Type: Soluble** 

**Analysis Batch: 67621** 

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	242.4		mg/Kg		97	90 - 110	

Lab Sample ID: LCSD 880-67439/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid **Prep Type: Soluble** 

Analysis Batch: 67621

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	245.2		mg/Kg		98	90 - 110	1	20	

Lab Sample ID: 890-5654-A-2-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

Matrix: Solid

Analysis Batch: 67621

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	<4.96	U	248	251.4		ma/Ka		100	90 - 110	

Lab Sample ID: 890-5654-A-2-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 67621

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	<4.96	U	248	251.2		mg/Kg		100	90 - 110	0	20

## **QC Association Summary**

Client: Ensolum Project/Site: Outrider CVB

Job ID: 890-5655-1 SDG: 03C1558289

**GC VOA** 

Prep Batch: 67587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5655-1	PH03	Total/NA	Solid	5035	
890-5655-2	PH03	Total/NA	Solid	5035	
890-5655-3	PH03	Total/NA	Solid	5035	
890-5655-4	PH03	Total/NA	Solid	5035	
890-5655-5	PH03	Total/NA	Solid	5035	
MB 880-67587/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67587/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67587/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5652-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-5652-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 67689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5655-1	PH03	Total/NA	Solid	8021B	67587
890-5655-2	PH03	Total/NA	Solid	8021B	67587
890-5655-3	PH03	Total/NA	Solid	8021B	67587
890-5655-4	PH03	Total/NA	Solid	8021B	67587
890-5655-5	PH03	Total/NA	Solid	8021B	67587
MB 880-67587/5-A	Method Blank	Total/NA	Solid	8021B	67587
MB 880-67694/5-A	Method Blank	Total/NA	Solid	8021B	67694
LCS 880-67587/1-A	Lab Control Sample	Total/NA	Solid	8021B	67587
LCSD 880-67587/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67587
890-5652-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	67587
890-5652-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67587

Prep Batch: 67694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67694/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 67872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5655-1	PH03	Total/NA	Solid	Total BTEX	
890-5655-2	PH03	Total/NA	Solid	Total BTEX	
890-5655-3	PH03	Total/NA	Solid	Total BTEX	
890-5655-4	PH03	Total/NA	Solid	Total BTEX	
890-5655-5	PH03	Total/NA	Solid	Total BTEX	

### GC Semi VOA

Analysis Batch: 67682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5655-1	PH03	Total/NA	Solid	8015B NM	67700
890-5655-2	PH03	Total/NA	Solid	8015B NM	67700
890-5655-3	PH03	Total/NA	Solid	8015B NM	67700
890-5655-4	PH03	Total/NA	Solid	8015B NM	67700
890-5655-5	PH03	Total/NA	Solid	8015B NM	67700
MB 880-67700/1-A	Method Blank	Total/NA	Solid	8015B NM	67700
LCS 880-67700/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67700
LCSD 880-67700/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67700
890-5655-1 MS	PH03	Total/NA	Solid	8015B NM	67700
890-5655-1 MSD	PH03	Total/NA	Solid	8015B NM	67700

## **QC Association Summary**

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5655-1 SDG: 03C1558289

### GC Semi VOA

### Prep Batch: 67700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5655-1	PH03	Total/NA	Solid	8015NM Prep	
890-5655-2	PH03	Total/NA	Solid	8015NM Prep	
890-5655-3	PH03	Total/NA	Solid	8015NM Prep	
890-5655-4	PH03	Total/NA	Solid	8015NM Prep	
890-5655-5	PH03	Total/NA	Solid	8015NM Prep	
MB 880-67700/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67700/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67700/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5655-1 MS	PH03	Total/NA	Solid	8015NM Prep	
890-5655-1 MSD	PH03	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 67833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5655-1	PH03	Total/NA	Solid	8015 NM	
890-5655-2	PH03	Total/NA	Solid	8015 NM	
890-5655-3	PH03	Total/NA	Solid	8015 NM	
890-5655-4	PH03	Total/NA	Solid	8015 NM	
890-5655-5	PH03	Total/NA	Solid	8015 NM	

### HPLC/IC

#### Leach Batch: 67439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5655-1	PH03	Soluble	Solid	DI Leach	
890-5655-2	PH03	Soluble	Solid	DI Leach	
890-5655-3	PH03	Soluble	Solid	DI Leach	
890-5655-4	PH03	Soluble	Solid	DI Leach	
890-5655-5	PH03	Soluble	Solid	DI Leach	
MB 880-67439/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67439/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67439/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5654-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5654-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### Analysis Batch: 67621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5655-1	PH03	Soluble	Solid	300.0	67439
890-5655-2	PH03	Soluble	Solid	300.0	67439
890-5655-3	PH03	Soluble	Solid	300.0	67439
890-5655-4	PH03	Soluble	Solid	300.0	67439
890-5655-5	PH03	Soluble	Solid	300.0	67439
MB 880-67439/1-A	Method Blank	Soluble	Solid	300.0	67439
LCS 880-67439/2-A	Lab Control Sample	Soluble	Solid	300.0	67439
LCSD 880-67439/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67439
890-5654-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	67439
890-5654-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	67439

Client: Ensolum Job ID: 890-5655-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH03** Lab Sample ID: 890-5655-1

Date Collected: 11/16/23 13:50 **Matrix: Solid** Date Received: 11/17/23 09:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	67587	11/21/23 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67689	11/28/23 04:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67872	11/28/23 04:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			67833	11/27/23 10:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	67700	11/27/23 09:32	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67682	11/27/23 10:51	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 07:23	SMC	EET MID

**Client Sample ID: PH03** Lab Sample ID: 890-5655-2

Date Collected: 11/16/23 13:55 **Matrix: Solid** Date Received: 11/17/23 09:31

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.04 g 5 mL 67587 11/21/23 16:50 MNR EET MID Total/NA 8021B **EET MID** Analysis 1 5 mL 5 mL 67689 11/28/23 04:34 MNR Total/NA Total BTEX 67872 11/28/23 04:34 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 67833 11/27/23 11:56 SM **EET MID** Total/NA 67700 Prep 8015NM Prep 9.90 g 10 mL 11/27/23 09:32 TKC EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 67682 11/27/23 11:56 SM **EET MID** Soluble SA Leach DI Leach 5.05 g 50 mL 67439 11/20/23 14:49 **EET MID** 

**Client Sample ID: PH03** Lab Sample ID: 890-5655-3 Date Collected: 11/16/23 14:00

50 mL

50 mL

67621

11/22/23 07:29

SMC

Date Received: 11/17/23 09:31

Analysis

300.0

Soluble

	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	67587	11/21/23 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67689	11/28/23 04:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67872	11/28/23 04:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			67833	11/27/23 12:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	67700	11/27/23 09:32	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67682	11/27/23 12:18	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 07:35	SMC	EET MID

Lab Sample ID: 890-5655-4 **Client Sample ID: PH03** Date Collected: 11/16/23 14:05 **Matrix: Solid** 

Date Received: 11/17/23 09:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	67587	11/21/23 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67689	11/28/23 05:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67872	11/28/23 05:25	SM	EET MID

**Eurofins Carlsbad** 

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**Matrix: Solid** 

**EET MID** 

Client: Ensolum Job ID: 890-5655-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: PH03** Lab Sample ID: 890-5655-4

Matrix: Solid

Date Collected: 11/16/23 14:05 Date Received: 11/17/23 09:31

	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			67833	11/27/23 12:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	67700	11/27/23 09:32	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67682	11/27/23 12:40	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 07:40	SMC	EET MID

**Client Sample ID: PH03** Lab Sample ID: 890-5655-5

Date Collected: 11/16/23 14:10 Matrix: Solid

Date Received: 11/17/23 09:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	67587	11/21/23 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67689	11/28/23 05:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			67872	11/28/23 05:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			67833	11/27/23 13:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	67700	11/27/23 09:32	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67682	11/27/23 13:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67439	11/20/23 14:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67621	11/22/23 07:46	SMC	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: 890-5655-1
Project/Site: Outrider CVB SDG: 03C1558289

### **Laboratory: Eurofins Midland**

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

Authority	Progra	am	Identification Number	Expiration Date		
Texas	NELA	Р	T104704400-23-26	06-30-24		
0 ,		ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes		
for which the agency do	oes not offer certification.  Prep Method	Matrix	Analyte			
8015 NM	1 TOP MOUNTOU	Solid	Total TPH			
Total BTEX		Solid	Total BTEX			

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### **Method Summary**

Client: Ensolum Job ID: 890-5655-1
Project/Site: Outrider CVB SDG: 03C1558289

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	EPA	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

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

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

**Eurofins Carlsbad** 

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## **Sample Summary**

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5655-1

SDG: 03C1558289

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5655-1	PH03	Solid	11/16/23 13:50	11/17/23 09:31	1'
890-5655-2	PH03	Solid	11/16/23 13:55	11/17/23 09:31	2'
890-5655-3	PH03	Solid	11/16/23 14:00	11/17/23 09:31	3'
890-5655-4	PH03	Solid	11/16/23 14:05	11/17/23 09:31	4'
890-5655-5	PH03	Solid	11/16/23 14:10	11/17/23 09:31	5'



## **Chain of Custody Environment Testing**

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

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Project Manager:	be	n B	2/11/			Bill to: (if	f differen	t)		LIT	ett	Green	<del></del>	er Comments	
Company Name:		Sdu		LC		Compan	y Name	:	XTO	0 '	en	ergy	Program: UST/PST PRP	Brownfields 🗌	RRC Superfund
Address:	312	2 1UCH	iono	11 perh	25 Hwy	Address:	:		51	04	E	Greenest	State of Project:		
City, State ZIP:	Cal	Shack	L NI	4,88	120	City, Stat	te ZIP:		CO	151	bar	1,1VIM,88220	Reporting: Level II Level III	PST/UST	TRRP Level IV
Phone:		7-854			Email:	BBe		0	21	KO	UN	1.com	Deliverables: EDD	ADaPT 🗆	Other:
Project Name:	OU	ride	-CV	B	Turn	Around						ANALYSIS RE	QUEST	Pres	servative Codes
Project Number:	04	CIS	583	149	Routine	Rush	า	Pres. Code						None: NO	DI Water: H <sub>2</sub> O
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Sampler's Name:	SIN	-		ione	TAT starts the									HCL: HC	HNO 3: HN
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SAMPLE RECEIPT		Temp B	lank:	Yes No	Wet Ice:	Yes	No	eter						H <sub>3</sub> PO <sub>4</sub> : HI	>
Samples Received Into	act:	Yes	No	Thermom	eter ID:	INA	100	The area				890-5655 Chain of	Custody	NaHSO 4:	
Cooler Custody Seals:		Yes No	N/A	Correctio	n Factor:	-0.	2	1 %						Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> :	NaSO 3
Sample Custody Seals	:	Yes No	N/A	Tempera	ture Reading:	3.	4_			X					e+NaOH: Zn
Total Containers:				Corrected	Temperature:	3.0	メ_		1	0	士			NaOH+As	corbic Acid: SAPC
Sample Ident	ification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	J	3	2			Sam	nple Comments
PHOS			5	1116	1313.50	17	G	1	X	×	+			(2)	- center
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pH03					14:10	81									
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of service. Eurofins Xenco w	ill be liable	only for the	cost of sam	ples and shall	not assume any respon	nsibility for a	any losses	or expen	nses incur	red by th	e dient if	subcontractors. It assigns standard such losses are due to circumstances lyzed. These terms will be enforced u	beyond the control		
Relinquished by			T		d by: (Signature		,			/Time		Relinquished by: (Sign		iture)	Date/Time
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Work Order No:

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

Relinquished by

Relinquished by

Custody Seals Intact.

Δ Yes Δ No

Custody Seal No

Eurofins Carlsbad

Phone 575-988-3199 Fax: 575-988-3199

1089 N Canal St. Carlsbad, NM 88220

## **Chain of Custody Record**



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**Environment Testing** 

11/28/2023

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Released to Imaging: 3/26/2024 3:19:52 PM

i · · · · · · · · · · · · · · · · · · ·	Sampler:			II -E	DIA													_		
Client Information (Sub Contract Lab)	Camplei			Lab Kra	рм mer, Je	ca					Carrier Tracking No(s)						COC № 890-1829 1			
Client Contact:	Phone			E-M									State o	of Orig	n:				Page:	
Shipping/Receiving Company				Jes	sıca Kı						m		New	Mexi	00				Page 1 of 1	
Eurofins Environment Testing South Centr							ns Red Texa		(See n	iote):									Job #: 890-5655-1	
Address	Due Date Request	ed	***************************************		†														Preservation Code	es.
1211 W Florida Ave ,	11/27/2023								Α	naly	ysis	Req	uest	ed					A HCL	M Hexane
City Midland	TAT Requested (d	lays):				A.0			7									and the second	B NaOH	N None
State Zip														1				1	C Zn Acetate D Nitric Acid	O - AsNaO2 P Na2O4S
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			S	Matrix			8	🖔	<u>a</u>	Total_BTEX_GCV				1		1				
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		Sample	(C=Comp,	S≍solid, O≃waste/oil,	발		8	ΙĒ,	8/8	100								2		
Sample Identification - Client ID (Lab ID)	Sample Date	Time		BT=Tissue, A=Air	Parfo	3	8015MOD_	8	3021	ota a	1							Total	Special Inc	structions/Note:
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PH03 (890-5655-1)	11/16/23	13 50	and desired and all the	Solid	TT	,	( x	X	1.		and the texture to	i min i	<u> </u>	About American	. n. a all lighters		diam.		<u> </u>	
	11/10/23	Mountain		Soliu	11		1	<u>↓^</u>	X	Х	<u> </u>									
PH03 (890-5655-2)	11/16/23	13 55 Mountain		Solid		)	(   x	X	x	X										
PH03 (890-5655-3)	11/16/23	14 00		0.11.3	++	+.		+	+	+	+	-	-				+	132		
	11/10/23	Mountain		Solid			( X	X	X	X										
PH03 (890-5655-4)	11/16/23	14 05 Mountain		Solid		)	∢ x	X	X	X		1						4		
PH03 (890-5655-5)	44/40/00	14 10	<del> </del>	0.1.1	++	+.		+-	+	+	+	<del>                                     </del>				+	╅┈	-		
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Note: Since laboratory accreditations are subject to change, Eurofins Environn	nent Testing South Cent	ral LLC places	the ownership	of method, an	alyte & a	ассге	ditation	comp	liance	nogu	our su	bcontr	act lab	orator	es Thi	s samr	le shir	ment	t is forwarded under ch	ain_of_custody If the
problem y does not currently maintain accreditation in the State of Origin isten	above for analysis/fest	s/matrix neina a	anaivzed the s	amniae muet b	a chinne	ad ha	ok to th	a Euro	ofine E	nuiron	amont T	Tooling	· Cauth	Cant	~ 110	Inhara		nih on		and dealers and a second
accreditation status should be brought to Eurofins Environment Testing South	Central LLC attention in	nmediately if	all requested a	ccreditations a	re currer	nt to o	date re	turn th	ne sign	ed Cr	nain of	Custo	dy atte	sting to	said co	omplia	nce to	Eurofi	ins Environment Testin	ig South Central LLC.
Possible Hazard Identification					s	Sample Disposal ( A fee may				may be assessed if samples are r					oles a		tain	ed longer than 1	month)	
Unconfirmed							Retu	rn To	Clie	nt	í	$\Box_{\mathcal{L}}$	ispos	al B	Lab .			Arch	hive For	Months
Deliverable Requested I, II III IV Other (specify)	Primary Deliver	able Rank.	2		s	peci	al Ins				equir	emer	nts							
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Date/Time

Cooler Temperature(s) °C and Other Remarks.

### **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-5655-1 SDG Number: 03C1558289

Login Number: 5655 List Source: Eurofins Carlsbad

List Number: 1

Creator: Lopez, Abraham

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

### **Login Sample Receipt Checklist**

Client: Ensolum Job

Job Number: 890-5655-1 SDG Number: 03C1558289

List Source: Eurofins Midland
List Number: 2
List Creation: 11/20/23 10:41 AM

Creator: Kramer, Jessica

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

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<6mm (1/4").

**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Ben Belill

**Ensolum** 

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 1/15/2024 10:52:01 AM Revision 2

# **JOB DESCRIPTION**

Outrider CVB 03C1558289

# **JOB NUMBER**

890-5768-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



# **Eurofins Carlsbad**

## **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

## **Authorization**

Generated 1/15/2024 10:52:01 AM Revision 2

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

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

Released to Imaging: 3/26/2024 3:19:52 PM

Client: Ensolum
Project/Site: Outrider CVB
Laboratory Job ID: 890-5768-1
SDG: 03C1558289

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## **Definitions/Glossary**

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB

SDG: 03C1558289

**Qualifiers** 

**GC VOA** Qualifier

Ε Result exceeded calibration range.

**Qualifier Description** 

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

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

GC Semi VOA

Qualifier **Qualifier Description** 

F2 MS/MSD RPD exceeds control limits

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description** 

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

**Glossary** 

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

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

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

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 Job ID: 890-5768-1 Project: Outrider CVB

Job ID: 890-5768-1 Eurofins Carlsbad

Job Narrative 890-5768-1

#### **REVISION**

The report being provided is a revision of the original report sent on 12/22/2023. The report (revision 2) is being revised due to Per client email, correcting sample depth.

Report revision history

Revision 1 - 1/4/2024 - Reason - Per client email, requesting sample depths be corrected to match COC.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 12/11/2023~3:44~PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was  $0.4^{\circ}C$ 

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SS07 (890-5768-1), SS08 (890-5768-2), SW03 (890-5768-3), SS09 (890-5768-4), SS10 (890-5768-5), SS11 (890-5768-6) and FS03 (890-5768-7).

#### **GC VOA**

Method 8021B: CCV was biased low; however another CCV was analyzed and acceptable within the 12 hour window; therefore, the data was qualified and reported.

(CCV 880-69272/32)

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-69289 and analytical batch 880-69272 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS11 (890-5768-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC Semi VOA

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-69100 and analytical batch 880-69044 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

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

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-68961 and analytical batch 880-69103 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was

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## **Case Narrative**

Client: Ensolum Job ID: 890-5768-1 Project: Outrider CVB

Job ID: 890-5768-1 (Continued)

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within acceptance limits.

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

Lab Sample ID: 890-5768-1

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: SS07** 

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Sample Depth: .5

Date Collected: 12/11/23 10:10	Matrix: Solid
Date Received: 12/11/23 15:44	
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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		12/18/23 09:42	12/18/23 17:13	1
Toluene	<0.00202	U	0.00202	mg/Kg		12/18/23 09:42	12/18/23 17:13	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		12/18/23 09:42	12/18/23 17:13	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		12/18/23 09:42	12/18/23 17:13	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		12/18/23 09:42	12/18/23 17:13	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		12/18/23 09:42	12/18/23 17:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130			12/18/23 09:42	12/18/23 17:13	1
1,4-Difluorobenzene (Surr)	81		70 - 130			12/18/23 09:42	12/18/23 17:13	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			12/18/23 17:13	1
Mathada CWO4C CO4E NM Di	anal Dames	O	DDO) (CC)					

Method. 5W040 0013 NM - Dieser Kange Organics (DKO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			12/14/23 23:16	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F2	49.8	mg/Kg		12/14/23 12:19	12/14/23 23:16	1	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		12/14/23 12:19	12/14/23 23:16	1	
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		12/14/23 12:19	12/14/23 23:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	

Juliogate	701 CCCVCI y	Quanner	Liiiit	rrepareu	Allalyzeu	Diriac
1-Chlorooctane	100		70 - 130	12/14/23 12:19	12/14/23 23:16	1
o-Terphenyl	103		70 - 130	12/14/23 12:19	12/14/23 23:16	1
– Method: EPA 300.0 - Anions, le	on Chromat	ography -	Soluble			

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127	5.00	mg/Kg			12/14/23 15:05	1

**Client Sample ID: SS08** Lab Sample ID: 890-5768-2 Date Collected: 12/11/23 10:20 **Matrix: Solid** Date Received: 12/11/23 15:44

Sample Depth: .5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		12/20/23 11:11	12/21/23 18:29	1
Toluene	<0.00198	U	0.00198	mg/Kg		12/20/23 11:11	12/21/23 18:29	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		12/20/23 11:11	12/21/23 18:29	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		12/20/23 11:11	12/21/23 18:29	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		12/20/23 11:11	12/21/23 18:29	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		12/20/23 11:11	12/21/23 18:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			12/20/23 11:11	12/21/23 18:29	1

Lab Sample ID: 890-5768-2

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: SS08** 

Date Collected: 12/11/23 10:20 Date Received: 12/11/23 15:44

Sample Depth: .5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130	12/20/23 11:11	12/21/23 18:29	1

### **Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			12/21/23 18:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			12/15/23 00:21	1

Method: SW846 8015B NM - Diesel Range	Organics (DRO) (GC)
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			\/\\/					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		12/14/23 12:19	12/15/23 00:21	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		12/14/23 12:19	12/15/23 00:21	1
Oll Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		12/14/23 12:19	12/15/23 00:21	1
Surrogato	%Pocovory	Qualifier	l imite			Propared	Analyzod	Dil Eac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	12/14/23 12:19	12/15/23 00:21	1
o-Terphenyl	107		70 - 130	12/14/23 12:19	12/15/23 00:21	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte		Qualifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69.0	4.95	mg/Kg			12/14/23 15:13	1

**Client Sample ID: SW03** Lab Sample ID: 890-5768-3 **Matrix: Solid** 

Date Collected: 12/11/23 12:45 Date Received: 12/11/23 15:44

Sample Depth: 0-5'

Method: SW846 8021B - Volatile Organic Compounds (	Method:	: SW846 8021B	- Volatile Organic	Compounds (GC)
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method. Offort Our ID - To	nathe Organie	Compoun	us ( <b>55</b> )					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 18:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 18:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 18:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/20/23 11:11	12/21/23 18:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 18:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/20/23 11:11	12/21/23 18:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			12/20/23 11:11	12/21/23 18:49	1

4-bromonuorobenzene (Sun)	95	10-130	12/20/23 11.11 12/21/23 16.49	1
1,4-Difluorobenzene (Surr)	108	70 - 130	12/20/23 11:11 12/21/23 18:49	1

## **Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg	_		12/21/23 18:49	1

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7 U	49.7	mg/Kg			12/15/23 00:43	1

**Matrix: Solid** 

Lab Sample ID: 890-5768-3

Lab Sample ID: 890-5768-4

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: SW03** 

Date Collected: 12/11/23 12:45 Date Received: 12/11/23 15:44

Sample Depth: 0-5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		12/14/23 12:19	12/15/23 00:43	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		12/14/23 12:19	12/15/23 00:43	1
Oll Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		12/14/23 12:19	12/15/23 00:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			12/14/23 12:19	12/15/23 00:43	1
o-Terphenyl	101		70 - 130			12/14/23 12:19	12/15/23 00:43	1

Method: EPA 300.0 - Anions, ion Chromatography - Soluble									
Analyte	Result Qu	ualifier RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	7.17	4.99	mg/Kg			12/14/23 15:21	1		

**Client Sample ID: SS09** 

Date Collected: 12/11/23 12:20

Date Received: 12/11/23 15:44

Sample Depth: .5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		12/20/23 11:11	12/21/23 19:09	1
Toluene	<0.00201	U	0.00201	mg/Kg		12/20/23 11:11	12/21/23 19:09	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		12/20/23 11:11	12/21/23 19:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		12/20/23 11:11	12/21/23 19:09	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		12/20/23 11:11	12/21/23 19:09	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		12/20/23 11:11	12/21/23 19:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			12/20/23 11:11	12/21/23 19:09	1
1,4-Difluorobenzene (Surr)	105		70 - 130			12/20/23 11:11	12/21/23 19:09	1
Method: TAL SOP Total BTE	X - Total BTE	X Calculat	ion					
Analyte	Result	Qualifier	RL		<u>D</u>	Prepared	Analyzed 12/21/23 19:09	Dil Fac
Analyte Total BTEX Method: SW846 8015 NM - D	Result <0.00402	Qualifier U Organics (	RL 0.00402 DRO) (GC)	mg/Kg	<u>D</u>		12/21/23 19:09	1
Analyte Total BTEX	Result <0.00402	Qualifier  U  Organics ( Qualifier	RL 0.00402		— <u>=</u>	Prepared Prepared		Dil Fac
Analyte Total BTEX  Method: SW846 8015 NM - D Analyte Total TPH  Method: SW846 8015B NM - Analyte	iesel Range ( Result <50.0  Diesel Range Result	Qualifier U Organics ( Qualifier U Organics Qualifier U	RL 0.00402 DRO) (GC) RL 50.0 (DRO) (GC) RL	mg/Kg  Unit mg/Kg  Unit	— <u>=</u>	Prepared Prepared	12/21/23 19:09  Analyzed 12/15/23 01:04  Analyzed	Dil Fac
Analyte Total BTEX  Method: SW846 8015 NM - D Analyte Total TPH  Method: SW846 8015B NM - Analyte Gasoline Range Organics (GRO)-C6-C10	iesel Range ( Result <50.0  Diesel Range Result <50.0	Qualifier U Organics ( Qualifier U Organics U Organics U	RL 0.00402 DRO) (GC) RL 50.0 (DRO) (GC) RL 50.0	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u></u> <u>D</u>	Prepared Prepared 12/14/23 12:19	12/21/23 19:09  Analyzed 12/15/23 01:04  Analyzed 12/15/23 01:04	Dil Fac
Analyte Total BTEX  Method: SW846 8015 NM - D Analyte Total TPH  Method: SW846 8015B NM - Analyte Gasoline Range Organics	iesel Range ( Result <50.0  Diesel Range Result	Qualifier U Organics ( Qualifier U Organics U Organics U	RL 0.00402 DRO) (GC) RL 50.0 (DRO) (GC) RL	mg/Kg  Unit mg/Kg  Unit	<u></u> <u>D</u>	Prepared Prepared 12/14/23 12:19	12/21/23 19:09  Analyzed 12/15/23 01:04  Analyzed	Dil Fac

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Dil Fac

Analyzed

Limits

70 - 130

70 - 130

%Recovery Qualifier

100

104

Prepared

12/14/23 12:19 12/15/23 01:04

12/14/23 12:19 12/15/23 01:04

Surrogate

o-Terphenyl

1-Chlorooctane

Lab Sample ID: 890-5768-4

Job ID: 890-5768-1

Client: Ensolum Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: SS09** Date Collected: 12/11/23 12:20

Date Received: 12/11/23 15:44

Sample Depth: .5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.5		5.00	mg/Kg			12/14/23 15:29	1

**Client Sample ID: SS10** Lab Sample ID: 890-5768-5 Matrix: Solid

Date Collected: 12/11/23 12:25 Date Received: 12/11/23 15:44

Sample Depth: .5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		12/20/23 11:11	12/21/23 19:30	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/20/23 11:11	12/21/23 19:30	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		12/20/23 11:11	12/21/23 19:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/20/23 11:11	12/21/23 19:30	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/20/23 11:11	12/21/23 19:30	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/20/23 11:11	12/21/23 19:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			12/20/23 11:11	12/21/23 19:30	1
1,4-Difluorobenzene (Surr)	108		70 - 130			12/20/23 11:11	12/21/23 19:30	1

Method. IAL OOI Total DILA	TOTAL DIE	A Gaicalat	1011					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/21/23 19:30	1

Method: SW846 8015 NM - Diesel	Diesel Range Organics (DRO) (GC)							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			12/15/23 01:26	1

Method: SW846 8015B NM - D	iesel Range	<b>Organics</b>	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		12/14/23 12:19	12/15/23 01:26	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		12/14/23 12:19	12/15/23 01:26	1
Oll Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		12/14/23 12:19	12/15/23 01:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			12/14/23 12:19	12/15/23 01:26	1
o-Terphenyl	110		70 - 130			12/14/23 12:19	12/15/23 01:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.3		4.98	mg/Kg			12/14/23 15:52	1

Lab Sample ID: 890-5768-6

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: SS11** 

Date Collected: 12/11/23 12:30 Date Received: 12/11/23 15:44

Sample Depth: .5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 19:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 19:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 19:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		12/20/23 11:11	12/21/23 19:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 19:50	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/20/23 11:11	12/21/23 19:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	0.08	S1-	70 - 130			12/20/23 11:11	12/21/23 19:50	1
1,4-Difluorobenzene (Surr)	106		70 - 130			12/20/23 11:11	12/21/23 19:50	1

Method. TAL SUP TOtal BTEX	- IULAI DIE	A Calculati	OH					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			12/21/23 19:50	1

Method: SW846 8015 NM - Dies	sel Range (	Organics (	DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			12/15/23 01:48	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		12/14/23 12:19	12/15/23 01:48	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		12/14/23 12:19	12/15/23 01:48	1
Oll Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		12/14/23 12:19	12/15/23 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	DII Fac
1-Chlorooctane	103		70 - 130	12/14/23 12:19	12/15/23 01:48	1
o-Terphenyl	106		70 - 130	12/14/23 12:19	12/15/23 01:48	1

ı	Wethod: EPA 300.0 - Anions, id	on Chromat	ograpny -	Soluble					
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	84.8		4.95	mg/Kg			12/14/23 16:00	1

**Client Sample ID: FS03** Lab Sample ID: 890-5768-7 Date Collected: 12/11/23 12:50 **Matrix: Solid** 

Date Received: 12/11/23 15:44

Sample Depth: 5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		12/20/23 11:11	12/21/23 20:25	1
Toluene	<0.00201	U	0.00201	mg/Kg		12/20/23 11:11	12/21/23 20:25	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		12/20/23 11:11	12/21/23 20:25	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		12/20/23 11:11	12/21/23 20:25	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		12/20/23 11:11	12/21/23 20:25	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		12/20/23 11:11	12/21/23 20:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			12/20/23 11:11	12/21/23 20:25	1

# **Client Sample Results**

Client: Ensolum Job ID: 890-5768-1
Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: FS03 Lab Sample ID: 890-5768-7

Date Collected: 12/11/23 12:50 Matrix: Solid
Date Received: 12/11/23 15:44

Sample Depth: 5'

Analyte

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130			12/20/23 11:11	12/21/23 20:25	1
Method: TAL SOP Total BTEX	. Total BTE	X Calculat	ion					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			12/21/23 20:25	1
Method: SW846 8015 NM - Di	esel Range (	Organics (	DRO) (GC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg		- <u></u>	12/15/23 02:09	1
-								
				Unit	n	Propared	Analyzod	Dil Eac
Analyte Gasoline Range Organics		Qualifier	(DRO) (GC) RL 50.1	Unit mg/Kg	<u>D</u>	Prepared 12/14/23 12:19	Analyzed 12/15/23 02:09	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.1	<b>Qualifier</b> U	<b>RL</b> 50.1	mg/Kg	<u>D</u>	12/14/23 12:19	12/15/23 02:09	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	<b>Qualifier</b> U	RL		<u>D</u>	12/14/23 12:19		Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.1	Qualifier U	<b>RL</b> 50.1	mg/Kg	<u>D</u>	12/14/23 12:19 12/14/23 12:19	12/15/23 02:09	Dil Fac
Method: SW846 8015B NM - EANAINTE  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate	Result <50.1 <50.1	Qualifier U U U	<b>RL</b> 50.1	mg/Kg	<u>D</u>	12/14/23 12:19 12/14/23 12:19	12/15/23 02:09 12/15/23 02:09	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.1 <50.1 <50.1	Qualifier U U U	FL 50.1 50.1 50.1	mg/Kg	<u>D</u>	12/14/23 12:19 12/14/23 12:19 12/14/23 12:19	12/15/23 02:09 12/15/23 02:09 12/15/23 02:09	1

4.97

Unit

mg/Kg

Prepared

Analyzed

12/14/23 16:08

Dil Fac

Result Qualifier

<4.97 U

## **Surrogate Summary**

Client: Ensolum Job ID: 890-5768-1
Project/Site: Outrider CVB SDG: 03C1558289

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		DED4		nt Surrogate Recovery (Acceptance Limit
		BFB1	DFBZ1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
80-37031-A-1-F MS	Matrix Spike	106	94	
80-37031-A-1-G MSD	Matrix Spike Duplicate	619 S1+	408 S1+	
80-37053-A-5-B MS	Matrix Spike	103	98	
30-37053-A-5-C MSD	Matrix Spike Duplicate	106	99	
90-5768-1	SS07	81	81	
90-5768-2	SS08	108	108	
90-5768-3	SW03	95	108	
0-5768-4	SS09	106	105	
90-5768-5	SS10	92	108	
0-5768-6	SS11	0.08 S1-	106	
0-5768-7	FS03	95	108	
CS 880-69289/1-A	Lab Control Sample	92	109	
CS 880-69454/1-A	Lab Control Sample	104	98	
CSD 880-69289/2-A	Lab Control Sample Dup	105	109	
CSD 880-69454/2-A	Lab Control Sample Dup	95	101	
IB 880-69289/5-A	Method Blank	68 S1-	90	
IB 880-69454/5-A	Method Blank	109	121	

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

			Percent Surro	ogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-5768-1	SS07	100	103	
890-5768-1 MS	SS07	122	111	
890-5768-1 MSD	SS07	103	94	
890-5768-2	SS08	101	107	
890-5768-3	SW03	101	101	
890-5768-4	SS09	100	104	
890-5768-5	SS10	104	110	
890-5768-6	SS11	103	106	
890-5768-7	FS03	108	110	
LCS 880-69100/2-A	Lab Control Sample	101	114	
LCSD 880-69100/3-A	Lab Control Sample Dup	103	124	
MB 880-69100/1-A	Method Blank	101	115	

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Released to Imaging: 3/26/2024 3:19:52 PM

OTPH = o-Terphenyl

2

4

6

0

Client: Ensolum

Job ID: 890-5768-1

SDG: 03C1558289

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

Lab Sample ID: MB 880-69289/5-A

Lab Sample ID: LCS 880-69289/1-A

**Matrix: Solid** 

**Analysis Batch: 69272** 

Project/Site: Outrider CVB

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Batch: 69289

	IVIB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/18/23 09:42	12/18/23 11:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/18/23 09:42	12/18/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/18/23 09:42	12/18/23 11:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/18/23 09:42	12/18/23 11:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/18/23 09:42	12/18/23 11:30	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		12/18/23 09:42	12/18/23 11:30	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	12/18/23 09:42	12/18/23 11:30	1
1,4-Difluorobenzene (Surr)	90		70 - 130	12/18/23 09:42	12/18/23 11:30	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 69289

**Analysis Batch: 69272** Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Benzene 70 - 130 0.100 0.07460 mg/Kg 75 Toluene 0.100 0.07474 mg/Kg 75 70 - 130 Ethylbenzene 0.100 0.08062 mg/Kg 81 70 - 130 82 m-Xylene & p-Xylene 0.200 0.1642 mg/Kg 70 - 130 o-Xylene 0.100 0.07803 78 70 - 130 mg/Kg

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-69289/2-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

**Matrix: Solid** 

**Analysis Batch: 69272** 

Prep Type: Total/NA Prep Batch: 69289 LCSD LCSD

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08165		mg/Kg		82	70 - 130	9	35
Toluene	0.100	0.07561		mg/Kg		76	70 - 130	1	35
Ethylbenzene	0.100	0.08217		mg/Kg		82	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1664		mg/Kg		83	70 - 130	1	35
o-Xylene	0.100	0.07988		mg/Kg		80	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-37031-A-1-F MS

**Client Sample ID: Matrix Spike Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 69272** Prep Batch: 69289 MS MS Sample Sample Spike %Rec Result Qualifier Added Result Qualifier Unit %Rec Limits

Analyte Benzene <0.00202 U F1 F2 0.0998 0.07523 75 70 - 130 mg/Kg Toluene <0.00202 U 0.0998 0.07619 mg/Kg 76 70 - 130

## **QC Sample Results**

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

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

Lab Sample ID: 880-37031-A-1-F MS

Lab Sample ID: 880-37031-A-1-G MSD

**Matrix: Solid** 

**Analysis Batch: 69272** 

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 69289

Spike MS MS %Rec Sample Sample Result Qualifier Added Result Qualifier Unit D %Rec Limits Ethylbenzene <0.00202 U F1 F2 0.0998 0.08897 mg/Kg 89 70 - 130 m-Xylene & p-Xylene <0.00403 U F1 F2 0.200 0.1811 mg/Kg 91 70 - 130 o-Xylene <0.00202 U F1 F2 0.0998 0.08511 mg/Kg 85 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

Prep Batch: 69289

**Matrix: Solid** 

**Analysis Batch: 69272** 

_	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U F1 F2	0.101	0.2203	F1 F2	mg/Kg		219	70 - 130	98	35
Toluene	<0.00202	U	0.101	0.08507		mg/Kg		84	70 - 130	11	35
Ethylbenzene	<0.00202	U F1 F2	0.101	0.1809	F1 F2	mg/Kg		179	70 - 130	68	35
m-Xylene & p-Xylene	<0.00403	U F1 F2	0.202	0.6505	F1 F2	mg/Kg		323	70 - 130	113	35
o-Xylene	<0.00202	U F1 F2	0.101	0.6911	E F1 F2	mg/Kg		686	70 - 130	156	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	619	S1+	70 - 130
1,4-Difluorobenzene (Surr)	408	S1+	70 - 130

Lab Sample ID: MB 880-69454/5-A

**Matrix: Solid** 

**Analysis Batch: 69587** 

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

Prep Batch: 69454

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 17:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 17:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 17:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/20/23 11:11	12/21/23 17:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/20/23 11:11	12/21/23 17:19	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/20/23 11:11	12/21/23 17:19	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	12/20/23 11:11	12/21/23 17:19	1
1,4-Difluorobenzene (Surr)	121		70 - 130	12/20/23 11:11	12/21/23 17:19	1

Lab Sample ID: LCS 880-69454/1-A

**Matrix: Solid** 

**Analysis Batch: 69587** 

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

Prep Batch: 69454

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08249		mg/Kg		82	70 - 130	
Toluene	0.100	0.08531		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.07553		mg/Kg		76	70 - 130	
m-Xylene & p-Xylene	0.200	0.1515		mg/Kg		76	70 - 130	

Client: Ensolum Project/Site: Outrider CVB

Job ID: 890-5768-1

SDG: 03C1558289

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

Lab Sample ID: LCS 880-69454/1-A

**Matrix: Solid** 

**Analysis Batch: 69587** 

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

Prep Batch: 69454

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits o-Xylene 0 100 0.09421 mg/Kg 94 70 - 130

%Rec

LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 104 70 - 130 1,4-Difluorobenzene (Surr) 70 - 130 98

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

Lab Sample ID: LCSD 880-69454/2-A **Matrix: Solid** 

Lab Sample ID: 880-37053-A-5-B MS

**Analysis Batch: 69587** 

**Prep Type: Total/NA** 

Prep Batch: 69454

Spike LCSD LCSD %Rec **RPD** Added Result Qualifier Limits **RPD** Limit **Analyte** Unit D %Rec Benzene 0.100 0.08494 mg/Kg 85 70 - 130 3 35 Toluene 0.100 0.08285 mg/Kg 83 70 - 130 3 35 Ethylbenzene 0.100 0.08367 mg/Kg 84 70 - 130 10 35 m-Xylene & p-Xylene 0.200 0.1592 80 70 - 130 5 35 mg/Kg o-Xylene 0.100 0.08774 mg/Kg 88 70 - 130 7 35

LCSD LCSD

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 95 70 - 130 1,4-Difluorobenzene (Surr) 101 70 - 130

**Client Sample ID: Matrix Spike** 

Prep Type: Total/NA

Prep Batch: 69454

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0990	0.07973		mg/Kg		81	70 - 130	
Toluene	<0.00200	U	0.0990	0.07931		mg/Kg		80	70 - 130	
Ethylbenzene	<0.00200	U	0.0990	0.06968		mg/Kg		70	70 - 130	
m-Xylene & p-Xylene	<0.00400	U	0.198	0.1471		mg/Kg		74	70 - 130	
o-Xylene	<0.00200	U	0.0990	0.08367		mg/Kg		85	70 - 130	

MS MS

Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 103 1,4-Difluorobenzene (Surr) 70 - 130 98

Lab Sample ID: 880-37053-A-5-C MSD

Matrix: Solid

**Matrix: Solid** 

**Analysis Batch: 69587** 

Analysis Ratch: 69587

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA Pron Batch: 69454

Allalysis Datell. 03301									LIEPL	Jaicii. (	73434
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.0998	0.08137		mg/Kg		82	70 - 130	2	35
Toluene	<0.00200	U	0.0998	0.07645		mg/Kg		77	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.0998	0.07618		mg/Kg		76	70 - 130	9	35
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1561		mg/Kg		78	70 - 130	6	35
o-Xylene	<0.00200	U	0.0998	0.08791		mg/Kg		88	70 - 130	5	35
o Atylonio	0.00200	J	0.0000	0.00101		9,9				U	

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

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

Lab Sample ID: 880-37053-A-5-C MSD

**Matrix: Solid** 

**Analysis Batch: 69587** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 69454

MSD MSD

%Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 106 70 - 130 1,4-Difluorobenzene (Surr) 99 70 - 130

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

Lab Sample ID: MB 880-69100/1-A

**Matrix: Solid** 

**Analysis Batch: 69044** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Batch: 69100

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/14/23 12:19	12/14/23 22:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/14/23 12:19	12/14/23 22:11	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/23 12:19	12/14/23 22:11	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	12/14/23 12:19	12/14/23 22:11	1
o-Terphenyl	115		70 - 130	12/14/23 12:19	12/14/23 22:11	1

Lab Sample ID: LCS 880-69100/2-A

**Matrix: Solid** 

**Analysis Batch: 69044** 

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

Prep Batch: 69100

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1067		mg/Kg		107	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	944.1		mg/Kg		94	70 - 130	
C10-C28)								

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	101	70 - 130
o-Terphenyl	114	70 - 130

Lab Sample ID: LCSD 880-69100/3-A

**Matrix: Solid** 

Analysis Batch: 69044

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

**Prep Type: Total/NA** Prep Batch: 69100

Analysis Buton, 00044							i icp L	Julion. V	00.00
-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1010		mg/Kg		101	70 - 130	5	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	868.2		mg/Kg		87	70 - 130	8	20
040 000)									

C10-C28)

LCSD L	CSD
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Surrogate	%Recovery Qual	lifier Limits
1-Chlorooctane	103	70 - 130
o-Terphenyl	124	70 - 130

Client: Ensolum Job ID: 890-5768-1 SDG: 03C1558289 Project/Site: Outrider CVB

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

Lab Sample ID: 890-5768-1 MS

**Matrix: Solid** 

**Analysis Batch: 69044** 

Client Sample ID: SS07 Prep Type: Total/NA Prep Batch: 69100

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Added %Rec Limits Analyte Unit D <49.8 U F2 Gasoline Range Organics 1010 1042 mg/Kg 101 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1010 1100 105 <498 U mg/Kg 70 - 130C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 122 70 - 130 o-Terphenyl 111

Client Sample ID: SS07 Lab Sample ID: 890-5768-1 MSD Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 69044** 

Prep Batch: 69100 Sample Sample Spike MSD MSD %Rec **RPD** Result Qualifier Added Result Qualifier D %Rec Limits RPD Limit Unit <49.8 U F2 1010 846.3 F2 82 70 - 130 mg/Kg 21

Gasoline Range Organics 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.8 U 1010 955.2 mg/Kg 90 70 - 130 14 20 C10-C28)

Analyte

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 103 70 - 130 o-Terphenyl 94 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-68961/1-A **Client Sample ID: Method Blank Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 69103** 

MB MB

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 12/14/23 12:00

Lab Sample ID: LCS 880-68961/2-A

**Matrix: Solid** 

**Prep Type: Soluble Analysis Batch: 69103** LCS LCS Spike %Rec

Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 244.2 mg/Kg 98 90 - 110

Lab Sample ID: LCSD 880-68961/3-A

Matrix: Solid

**Analysis Batch: 69103** 

LCSD LCSD **RPD** Spike %Rec Added Analyte Result Qualifier Unit %Rec Limits **RPD** Limit 250 Chloride 243.9 mg/Kg 98 90 - 110 20

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**Prep Type: Soluble** 

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

## **QC Sample Results**

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-5767-A-1-B MS **Client Sample ID: Matrix Spike Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 69103** 

%Rec Sample Sample Spike MS MS Result Qualifier Analyte Result Qualifier Added Unit D %Rec Limits Chloride 252 926 F1 1090 F1 mg/Kg 65 90 - 110

Lab Sample ID: 890-5767-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** 

**Prep Type: Soluble** 

**Analysis Batch: 69103** 

Sample Sample Spike MSD MSD %Rec **RPD** Added **Analyte** Result Qualifier Result Qualifier Unit D %Rec Limits RPD Limit Chloride 926 F1 252 1087 F1 90 - 110 0 mg/Kg 64

# **QC Association Summary**

Client: Ensolum Job ID: 890-5768-1
Project/Site: Outrider CVB SDG: 03C1558289

## **GC VOA**

#### **Analysis Batch: 69272**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-1	SS07	Total/NA	Solid	8021B	69289
MB 880-69289/5-A	Method Blank	Total/NA	Solid	8021B	69289
LCS 880-69289/1-A	Lab Control Sample	Total/NA	Solid	8021B	69289
LCSD 880-69289/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	69289
880-37031-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	69289
880-37031-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	69289

#### Prep Batch: 69289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-1	SS07	Total/NA	Solid	5035	
MB 880-69289/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-69289/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-69289/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-37031-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
880-37031-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## **Analysis Batch: 69379**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-1	SS07	Total/NA	Solid	Total BTEX	
890-5768-2	SS08	Total/NA	Solid	Total BTEX	
890-5768-3	SW03	Total/NA	Solid	Total BTEX	
890-5768-4	SS09	Total/NA	Solid	Total BTEX	
890-5768-5	SS10	Total/NA	Solid	Total BTEX	
890-5768-6	SS11	Total/NA	Solid	Total BTEX	
890-5768-7	FS03	Total/NA	Solid	Total BTEX	

#### Prep Batch: 69454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-2	SS08	Total/NA	Solid	5035	
890-5768-3	SW03	Total/NA	Solid	5035	
890-5768-4	SS09	Total/NA	Solid	5035	
890-5768-5	SS10	Total/NA	Solid	5035	
890-5768-6	SS11	Total/NA	Solid	5035	
890-5768-7	FS03	Total/NA	Solid	5035	
MB 880-69454/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-69454/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-69454/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-37053-A-5-B MS	Matrix Spike	Total/NA	Solid	5035	
880-37053-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### **Analysis Batch: 69587**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-2	SS08	Total/NA	Solid	8021B	69454
890-5768-3	SW03	Total/NA	Solid	8021B	69454
890-5768-4	SS09	Total/NA	Solid	8021B	69454
890-5768-5	SS10	Total/NA	Solid	8021B	69454
890-5768-6	SS11	Total/NA	Solid	8021B	69454
890-5768-7	FS03	Total/NA	Solid	8021B	69454
MB 880-69454/5-A	Method Blank	Total/NA	Solid	8021B	69454
LCS 880-69454/1-A	Lab Control Sample	Total/NA	Solid	8021B	69454
LCSD 880-69454/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	69454

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# **QC Association Summary**

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

# **GC VOA (Continued)**

#### **Analysis Batch: 69587 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37053-A-5-B MS	Matrix Spike	Total/NA	Solid	8021B	69454
880-37053-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	69454

#### **GC Semi VOA**

#### Analysis Batch: 69044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-1	SS07	Total/NA	Solid	8015B NM	69100
890-5768-2	SS08	Total/NA	Solid	8015B NM	69100
890-5768-3	SW03	Total/NA	Solid	8015B NM	69100
890-5768-4	SS09	Total/NA	Solid	8015B NM	69100
890-5768-5	SS10	Total/NA	Solid	8015B NM	69100
890-5768-6	SS11	Total/NA	Solid	8015B NM	69100
890-5768-7	FS03	Total/NA	Solid	8015B NM	69100
MB 880-69100/1-A	Method Blank	Total/NA	Solid	8015B NM	69100
LCS 880-69100/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	69100
LCSD 880-69100/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	69100
890-5768-1 MS	SS07	Total/NA	Solid	8015B NM	69100
890-5768-1 MSD	SS07	Total/NA	Solid	8015B NM	69100

#### Prep Batch: 69100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-1	SS07	Total/NA	Solid	8015NM Prep	
890-5768-2	SS08	Total/NA	Solid	8015NM Prep	
890-5768-3	SW03	Total/NA	Solid	8015NM Prep	
890-5768-4	SS09	Total/NA	Solid	8015NM Prep	
890-5768-5	SS10	Total/NA	Solid	8015NM Prep	
890-5768-6	SS11	Total/NA	Solid	8015NM Prep	
890-5768-7	FS03	Total/NA	Solid	8015NM Prep	
MB 880-69100/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-69100/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-69100/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5768-1 MS	SS07	Total/NA	Solid	8015NM Prep	
890-5768-1 MSD	SS07	Total/NA	Solid	8015NM Prep	

#### **Analysis Batch: 69201**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-1	SS07	Total/NA	Solid	8015 NM	
890-5768-2	SS08	Total/NA	Solid	8015 NM	
890-5768-3	SW03	Total/NA	Solid	8015 NM	
890-5768-4	SS09	Total/NA	Solid	8015 NM	
890-5768-5	SS10	Total/NA	Solid	8015 NM	
890-5768-6	SS11	Total/NA	Solid	8015 NM	
890-5768-7	FS03	Total/NA	Solid	8015 NM	

#### **HPLC/IC**

#### Leach Batch: 68961

<b>Lab Sample ID</b> 890-5768-1	Client Sample ID SS07	Prep Type Soluble	Solid	Method DI Leach	Prep Batch
890-5768-2	SS08	Soluble	Solid	DI Leach	
890-5768-3	SW03	Soluble	Solid	DI Leach	

# **QC Association Summary**

Client: Ensolum
Project/Site: Outrider CVB
Job ID: 890-5768-1
SDG: 03C1558289

# **HPLC/IC (Continued)**

#### Leach Batch: 68961 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-4	SS09	Soluble	Solid	DI Leach	
890-5768-5	SS10	Soluble	Solid	DI Leach	
890-5768-6	SS11	Soluble	Solid	DI Leach	
890-5768-7	FS03	Soluble	Solid	DI Leach	
MB 880-68961/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-68961/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-68961/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5767-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5767-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### **Analysis Batch: 69103**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5768-1	SS07	Soluble	Solid	300.0	68961
890-5768-2	SS08	Soluble	Solid	300.0	68961
890-5768-3	SW03	Soluble	Solid	300.0	68961
890-5768-4	SS09	Soluble	Solid	300.0	68961
890-5768-5	SS10	Soluble	Solid	300.0	68961
890-5768-6	SS11	Soluble	Solid	300.0	68961
890-5768-7	FS03	Soluble	Solid	300.0	68961
MB 880-68961/1-A	Method Blank	Soluble	Solid	300.0	68961
LCS 880-68961/2-A	Lab Control Sample	Soluble	Solid	300.0	68961
LCSD 880-68961/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	68961
890-5767-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	68961
890-5767-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	68961

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**Client Sample ID: SS07** 

Project/Site: Outrider CVB

Client: Ensolum

Lab Sample ID: 890-5768-1

Matrix: Solid

Date Collected: 12/11/23 10:10 Date Received: 12/11/23 15:44

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	69289	12/18/23 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69272	12/18/23 17:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			69379	12/18/23 17:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			69201	12/14/23 23:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	69100	12/14/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69044	12/14/23 23:16	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	68961	12/13/23 07:54	SA	EET MID
Soluble	Analysis	300.0		1			69103	12/14/23 15:05	CH	EET MID

**Client Sample ID: SS08** Lab Sample ID: 890-5768-2 Date Collected: 12/11/23 10:20

Date Received: 12/11/23 15:44

**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			5.05 g	5 mL	69454	12/20/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69587	12/21/23 18:29	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69379	12/21/23 18:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			69201	12/15/23 00:21	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	69100	12/14/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69044	12/15/23 00:21	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	68961	12/13/23 07:54	SA	EET MID
Soluble	Analysis	300.0		1			69103	12/14/23 15:13	CH	EET MID

**Client Sample ID: SW03** Lab Sample ID: 890-5768-3 Date Collected: 12/11/23 12:45 **Matrix: Solid** 

Date Received: 12/11/23 15:44

	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 mL	69454	12/20/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69587	12/21/23 18:49	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69379	12/21/23 18:49	AJ	EET MID
Total/NA	Analysis	8015 NM		1			69201	12/15/23 00:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	69100	12/14/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69044	12/15/23 00:43	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	68961	12/13/23 07:54	SA	EET MID
Soluble	Analysis	300.0		1			69103	12/14/23 15:21	CH	EET MID

**Client Sample ID: SS09** Lab Sample ID: 890-5768-4 Date Collected: 12/11/23 12:20 Matrix: Solid

Date Received: 12/11/23 15:44

	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	69454	12/20/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69587	12/21/23 19:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69379	12/21/23 19:09	AJ	EET MID

Client: Ensolum Job ID: 890-5768-1 Project/Site: Outrider CVB SDG: 03C1558289

**Client Sample ID: SS09** Lab Sample ID: 890-5768-4

Date Collected: 12/11/23 12:20 Matrix: Solid Date Received: 12/11/23 15:44

	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			69201	12/15/23 01:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	69100	12/14/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69044	12/15/23 01:04	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	68961	12/13/23 07:54	SA	EET MID
Soluble	Analysis	300.0		1			69103	12/14/23 15:29	CH	EET MID

**Client Sample ID: SS10** Lab Sample ID: 890-5768-5

Date Collected: 12/11/23 12:25 **Matrix: Solid** 

Date Received: 12/11/23 15:44

	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	69454	12/20/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69587	12/21/23 19:30	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69379	12/21/23 19:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			69201	12/15/23 01:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	69100	12/14/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69044	12/15/23 01:26	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	68961	12/13/23 07:54	SA	EET MID
Soluble	Analysis	300.0		1			69103	12/14/23 15:52	CH	EET MID

**Client Sample ID: SS11** Lab Sample ID: 890-5768-6 Date Collected: 12/11/23 12:30 **Matrix: Solid** 

Date Received: 12/11/23 15:44

	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	69454	12/20/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69587	12/21/23 19:50	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69379	12/21/23 19:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			69201	12/15/23 01:48	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	69100	12/14/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69044	12/15/23 01:48	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	68961	12/13/23 07:54	SA	EET MID
Soluble	Analysis	300.0		1			69103	12/14/23 16:00	CH	EET MID

**Client Sample ID: FS03** Lab Sample ID: 890-5768-7 Date Collected: 12/11/23 12:50 Matrix: Solid

Date Received: 12/11/23 15:44

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	69454	12/20/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69587	12/21/23 20:25	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69379	12/21/23 20:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			69201	12/15/23 02:09	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	9.98 g 1 uL	10 mL 1 uL	69100 69044	12/14/23 12:19 12/15/23 02:09	TKC SM	EET MID EET MID

**Eurofins Carlsbad** 

Released to Imaging: 3/26/2024 3:19:52 PM

## Lab Chronicle

Client: Ensolum Job ID: 890-5768-1
Project/Site: Outrider CVB SDG: 03C1558289

Client Sample ID: FS03 Lab Sample ID: 890-5768-7

Date Collected: 12/11/23 12:50

Date Received: 12/11/23 15:44

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	68961	12/13/23 07:54	SA	EET MID
Soluble	Analysis	300.0		1			69103	12/14/23 16:08	CH	EET MID

#### Laboratory References:

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

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# **Accreditation/Certification Summary**

Client: Ensolum Job ID: 890-5768-1
Project/Site: Outrider CVB SDG: 03C1558289

## **Laboratory: Eurofins Midland**

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

Authority	Progra	am	Identification Number	Expiration Date	
Texas	NELA	ס	T104704400-23-26	06-30-24	
<b>T</b> ( ) :	to the deal to distribute	4 h. 44 . L. L. L			
The following analytes	s are included in this rebo	rt but the laboratory is i	not certitied by the doverning authori	itvo i nis iist mav include anai	
,	s are included in this repo does not offer certification	,	not certified by the governing authori	ity. This list may include anal	
,	•	,	not certified by the governing authori Analyte	ity. I nis iist may include anai	
for which the agency	does not offer certification	•	, , ,	ity. I nis list may include anal	

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# **Method Summary**

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5768-1

SDG: 03C1558289

Laboratory	
EET MID	
EET MID	

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### **Laboratory References:**

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

**Eurofins Carlsbad** 

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# **Sample Summary**

Client: Ensolum

Project/Site: Outrider CVB

Job ID: 890-5768-1

SDG: 03C1558289

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5768-1	SS07	Solid	12/11/23 10:10	12/11/23 15:44	.5
890-5768-2	SS08	Solid	12/11/23 10:20	12/11/23 15:44	.5
890-5768-3	SW03	Solid	12/11/23 12:45	12/11/23 15:44	0-5'
890-5768-4	SS09	Solid	12/11/23 12:20	12/11/23 15:44	.5
890-5768-5	SS10	Solid	12/11/23 12:25	12/11/23 15:44	.5
890-5768-6	SS11	Solid	12/11/23 12:30	12/11/23 15:44	.5
890-5768-7	FS03	Solid	12/11/23 12:50	12/11/23 15:44	5'

3	eu	rol	H	15

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

**Environment Testing** 

Xenço

## **Chain of Custody**

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

EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

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Project Manager:	Ben E	Belill				Bill to: (if	differen	it)	Garre	ett Gre	en										Vork	Orde	r Comments		
Company Name:	Enso	um				Compan	y Nam	e:	хто	Energ	у						Prog	gram:	UST/F	ST 🗌	PRP	Bro	wnfields R	RC∏ s	uperfund [
Address:	3122	National I	Parks H	lwy		Address	:		3104	E. Gr	een St								roject						
City, State ZIP:	Caris	bad, NM 8	88220			City, Sta	te ZIP:		Carls	bad, N	VM 882	20				$\perp$	1 .			_			ST/UST   TF		Level IV
Phone:	303-8	87-2946			Email:	: Garrett.Green@ExxonMobil.com							Deliverables: EDD ADaPT Other:												
Project Name:		Outr	rider C\	/B	Turr	Around								ANAL	YSIS	REC	UES	т					Prese	rvative	Codes
Project Number:		030	155828	39	✓ Routine	Rus	h	Pres.		<u></u>										1		4-	None: NO	DI	Water: H <sub>2</sub> O
Project Location:					Due Date:						1		andn id	1 10 110 110	11 <b>21</b> 11 14 <b>11</b>		HILDE		1				Cool: Cool		OH: Me
Sampler's Name: PO#:		Conno	or White	man	TAT starts the																	HCL: HC H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>		O <sub>3</sub> : HN OH: Na	
SAMPLE RECE	IPT	Temp B	Blank:	Yes No	Wet Ice:	Yes	No	arameters	0.0			i							1				H₃PO₄: HP		
Samples Received I	ntact:	(Yes)		Thermometer	r ID:	Tra	507	arar	3000			-	390-576	68 Ch	ain of	Cus	ody	_					NaHSO <sub>4</sub> : N		
Cooler Custody Sea			Correction Fa		-0.2			PA				1 1		1		1	1	1	1	1		Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : Na Zn Acetate+	-	-	
Sample Custody Sea	als:	Yes No	_	Temperature		0.6		21) ES (E											NaOH+Asc						
Total Containers:				Corrected Te		L Q.			8	801	(8021)														
Sample Ide	ntificati	on	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX												Samp	le Com	ments
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550	8				1020	.5"		1										_		1_			NAF	P233065	1127
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Total 200.7 / 6		200.8 / 6			TCLP / S																		Na Sr TI Sr / 245.1 / 747		

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.

Relinq	uished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 6	THA	alela	15:44 12/1	1		
3				4		
5				6		
				<u> </u>		Revised Date 08/25/2020 Rev. 2020.2









## **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-5768-1 SDG Number: 03C1558289

Login Number: 5768 **List Source: Eurofins Carlsbad** 

List Number: 1

Creator: Lopez, Abraham

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

## **Login Sample Receipt Checklist**

Client: Ensolum

Job Number: 890-5768-1

SDG Number: 03C1558289

Login Number: 5768

List Source: Eurofins Midland
List Number: 2

List Creation: 12/13/23 11:31 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 31 of 31 1/15/2024 (Rev. 2)

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<6mm (1/4").



APPENDIX E

**NMOCD Notifications** 

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Sent: Thursday, November 9, 2023 4:16 PM

**To:** Collins, Melanie <melanie.collins@exxonmobil.com>; spills@slo.state.nm.us

Cc: Lambert, Tommee L <tommee.l.lambert@exxonmobil.com>; Green, Garrett J

<garrett.green@exxonmobil.com>; Ben Belill <bbelill@ensolum.com>; Goodgame, Gary Glen

<gary.goodgame@exxonmobil.com>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Bratcher,

Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD

<Robert.Hamlet@emnrd.nm.gov>

Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 11/13/23 - 11/17/23)

You don't often get email from <a href="mailto:shelly.wells@emnrd.nm.gov">shelly.wells@emnrd.nm.gov</a>. Learn why this is important

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

Hi Melanie,

The OCD has received your notification. Notification requirements are **two full business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to ensure inclusion in the project file.

Thank you,

# Shelly

Shelly Wells \* Environmental Specialist-Advanced Environmental Bureau EMNRD-Oil Conservation Division 1220 S. St. Francis Drive|Santa Fe, NM 87505 (505)469-7520|Shelly.Wells@emnrd.nm.gov http://www.emnrd.state.nm.us/OCD/

**From:** Collins, Melanie < melanie.collins@exxonmobil.com >

Sent: Thursday, November 9, 2023 1:30 PM

**To:** Enviro, OCD, EMNRD < OCD.Enviro@emnrd.nm.gov>; spills@slo.state.nm.us **Cc:** Lambert, Tommee L < tommee.l.lambert@exxonmobil.com>; Green, Garrett J < garrett.green@exxonmobil.com>; bbelill@ensolum.com; Goodgame, Gary Glen < gary.goodgame@exxonmobil.com>

**Subject:** [EXTERNAL] XTO - Sampling Notification (Week of 11/13/23 - 11/17/23)

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

All,

XTO plans to complete final sampling activities at the sites listed below for the week of November 13, 2023, between 8 a.m. and 5 p.m MST.

#### Thank you,

Site Name	Outrider CVB
Location	J-28-24S-32E; Lea County, NM
Incident ID	nAPP2330651127
Source & Description of Activities	Sampling
Expected Duration for Activities	2 Days (11.13.23-11.14.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	BLM

Site Name	Remuda Basin 1
Location	J-24-23S-29E; Eddy County, NM
Incident ID	NAB1836137253
Source & Description of Activities	Sampling
Expected Duration for Activities	3 Days (11.13.23-11.15.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Thank you,

Melanie Collins



Environmental Technician

 $\underline{melanie.collins@exxonmobil.com}$ 

432-556-3756

From: Wells, Shelly, EMNRD

To: <u>Collins, Melanie</u>; <u>spills@slo.state.nm.us</u>

Cc: Green, Garrett 1; Lambert, Tommee L; Ben Belill; Tacoma Morrissey; Velez, Nelson, EMNRD; Hamlet, Robert, EMNRD;

Bratcher, Michael, EMNRD; Maxwell, Ashley, EMNRD

Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 12/11/23 - 12/15/23)

Date: Thursday, December 7, 2023 10:49:30 AM

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

Public Notice Implementation of Digital C-141 and Incident Statuses (1).pdf

Some people who received this message don't often get email from shelly.wells@emnrd.nm.gov. <u>Learn why this is important</u>

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

Good morning Melanie,

I have attached the new procedures for submitting both liner inspection and confirmation sampling notifications. Please refer to page 59 of the attached document for submittal procedures. It will walk you through the process. Notifications need to be submitted this way from here on out.

Shelly

Shelly Wells \* Environmental Specialist-Advanced

Environmental Bureau

**EMNRD-Oil Conservation Division** 

1220 S. St. Francis Drive | Santa Fe, NM 87505

(505)469-7520|Shelly.Wells@emnrd.nm.gov

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

From: Collins, Melanie <melanie.collins@exxonmobil.com>

Sent: Thursday, December 7, 2023 7:28 AM

**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; spills@slo.state.nm.us

Cc: Green, Garrett J <garrett.green@exxonmobil.com>; Lambert, Tommee L

<tommee.l.lambert@exxonmobil.com>; bbelill@ensolum.com; Tacoma Morrissey

<tmorrissey@ensolum.com>

Subject: [EXTERNAL] XTO - Sampling Notification (Week of 12/11/23 - 12/15/23)

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

All,

XTO plans to complete final sampling activities at the sites listed below for the week of December 11, 2023, between 8 a.m. and 5 p.m MST.

Thank you,

Site Name	PLU 29-20 BS 108H
Location	A-29-25S-31E; Eddy County, NM
Incident ID	nAPP2328644007
Source & Description of Activities	Soil Sampling
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	BLM
Sampling surface area (square feet)	9,250
Estimated Number of Samples	57
Sampling Dates	12/11/2023 (Monday) – 12/13/2023 (Wednesday)
Sampling Times	8:00am to 5:00pm MST
	GPS at 32.10662, -103.79189. Open Access, potential H2S and
Site Location and Additional Info	livestock.

Site Name	Outrider CVB
Location	J-28-24S-32E; Lea County, NM
Incident ID	nAPP2330651127
Source & Description of Activities	Soil Sampling
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	BLM
Sampling surface area (square feet)	800
Estimated Number of Samples	10
Sampling Dates	12/11/2023 (Monday) – 12/12/2023 (Tuesday)
Sampling Times	8:00am to 5:00pm MST
	GPS at 32.186222, -103.676731. Open Access, potential H2S
Site Location and Additional Info	and livestock.

Site Name	Nash Unit #046H
Location	C-18-23S-30E; Eddy County, NM
Incident ID	NAB1821139914
Source & Description of Activities	Soil Sampling
Env Consultant	Ensolum
Contractor	Tex Mex

Sampling Notification Required	Yes
Surface Owner	SLO
Sampling surface area (square feet)	800
Estimated Number of Samples	10
Sampling Dates	12/14/2023 (Thursday) – 12/15/2023 (Friday)
Sampling Times	8:00am to 5:00pm MST
Additional Sampling Information	Delineation soil sampling only.
Site Location and Additional Info	GPS at 32.308253, -103.927077. Open Access, potential H2S and livestock. Location along active lease road.

Site Name	Pierce Canyon 17 Tank Battery
Location	P-17-25S-30E; Eddy County, NM
Incident ID	NAPP2233951574
Source & Description of Activities	Soil Sampling
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	BLM
Sampling surface area (square feet)	8,900
Estimated Number of Samples	30
Sampling Dates	12/14/2023 (Thursday) – 12/15/2023 (Friday)
Sampling Times	8:00am to 5:00pm MST
Additional Sampling Information	NMOCD approved 500 square foot sampling variance
	GPS at 32.124181, -103.895993. Open Access, potential H2S
Site Location and Additional Info	and livestock.

Site Name	Remuda Basin 1
Location	J-24-23S-29E; Eddy County, NM
Incident ID	NAB1836137253
Source & Description of Activities	Soil Sampling
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO
Sampling surface area (square feet)	15,000

Estimated Number of Samples	85
Sampling Dates	12/11/2023 (Monday) – 12/15/2023 (Friday)
Sampling Times	8:00am to 5:00pm MST
	GPS at 32.288133, -103.936189. Open Access, potential H2S
Site Location and Additional Info	and livestock.

Thank you,

Melanie Collins

Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756

<u>District I</u> 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** 

QUESTIONS

Action 305589

#### **QUESTIONS**

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	305589
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2330651127
Incident Name	NAPP2330651127 OUTRIDER CVB TANK BATTERY @ 0
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	OUTRIDER CVB TANK BATTERY
Date Release Discovered	10/21/2023
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Equipment Failure   Other (Specify)   Crude Oil   Released: 7 BBL   Recovered: 6 BBL   Lost: 1 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	A broken sight glass on heater treater 501 caused fluids to release to pad. All free fluids were recovered. A third-party contractor has been retained for remediation purposes.

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

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

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

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

QUESTIONS, Page 2

Action 305589

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462	2 1 e, 14141 07 303
OUEOT	7010 (
QUEST Operator:	10NS (continued)
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	305589
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	
Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.	e. gas only) are to be submitted on the C-129 form.
Initial Response	
The responsible party must undertake the following actions immediately unless they could create a	safety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	liation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of sted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of evaluation in the follow-up C-141 submission.
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.	
1	Name: Carrett Croop

Title: SHE Coordinator

Email: garrett.green@exxonmobil.com

I hereby agree and sign off to the above statement

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

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

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

QUESTIONS, Page 3

Action 305589

**QUESTIONS** (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	305589
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release ar	nd the following surface areas:
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provide	ed to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes	
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamin	nation associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Was this release entirely contained within a lined containment area	No	
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride (EPA 300.0 or SM4500 Cl B)	127	
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	739	
GRO+DRO (EPA SW-846 Method 8015M)	681	
BTEX (EPA SW-846 Method 8021B or 8260B)	0.1	
Benzene (EPA SW-846 Method 8021B or 8260B)	0	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes comp. which includes the anticipated timelines for beginning and completing the remediation.	pleted efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,	
On what estimated date will the remediation commence	11/08/2023	
On what date will (or did) the final sampling or liner inspection occur	12/11/2023	
On what date will (or was) the remediation complete(d)	12/11/2023	
What is the estimated surface area (in square feet) that will be reclaimed	2040	
What is the estimated volume (in cubic yards) that will be reclaimed	300	
What is the estimated surface area (in square feet) that will be remediated	550	
What is the estimated volume (in cubic yards) that will be remediated	100	
These estimated dates and measurements are recognized to be the best guess or calculation a	at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted	d in accordance with the physical realities encountered during remediation. If the responsible party has any need to	

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 4

Action 305589

**QUESTIONS** (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	305589
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Remediation Plan (continued)	Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:		
(Select all answers below that apply.)		
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes	
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]	
OR which OCD approved well (API) will be used for off-site disposal	Not answered.	
OR is the off-site disposal site, to be used, out-of-state	Not answered.	
OR is the off-site disposal site, to be used, an NMED facility	Not answered.	
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.	
(In Situ) Soil Vapor Extraction	Not answered.	
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.	
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.	
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.	
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.	
OTHER (Non-listed remedial process)	Not answered.	

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC which includes the anticipated timelines for beginning and completing the remediation.

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.

I hereby agree and sign off to the above statement

Name: Garrett Green Title: SHE Coordinator

Email: garrett.green@exxonmobil.com Date: 01/19/2024

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 5

Action 305589

#### **QUESTIONS** (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	305589
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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

QUESTIONS, Page 6

Action 305589

#### **QUESTIONS** (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	305589
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	292472
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	12/11/2023
What was the (estimated) number of samples that were to be gathered	10
What was the sampling surface area in square feet	800

Remediation Closure Request				
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.				
Requesting a remediation closure approval with this submission	Yes			
Have the lateral and vertical extents of contamination been fully delineated	Yes			
Was this release entirely contained within a lined containment area	No			
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes			
What was the total surface area (in square feet) remediated	550			
What was the total volume (cubic yards) remediated	100			
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes			
What was the total surface area (in square feet) reclaimed	550			
What was the total volume (in cubic yards) reclaimed	100			
Summarize any additional remediation activities not included by answers (above)	Site assessment and excavation activities were conducted at the Site to address the October 21, 2023, release of crude oil. Laboratory analytical results for excavation soil samples collected from the final excavation extent indicated all COC concentrations were compliant with the Closure Criteria. Based on laboratory analytical results, no further remediation is required at this time. Areas pending reclamation, approximately 1,490 square feet and 200 cubic yards, will be completed during pad abandonment or major facility reconstruction.			

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 (in .pdf format) 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.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement

I hereby agree and sign off to the above statement

Title: SHE Coordinator
Email: garrett.green@exxonmobil.com
Date: 01/19/2024

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

QUESTIONS, Page 7

Action 305589

**QUESTIONS** (continued)

Operator:	OGRID:
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	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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

CONDITIONS

Action 305589

#### **CONDITIONS**

Operator:	OGRID:
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	Action Type:
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#### CONDITIONS

Created By		Condition Date
nvelez	None	3/26/2024