

December 28, 2022

New Mexico Oil Conservation Division

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

Re: Revised Remediation Work Plan

Elvis Injection Line

Incident Number NAPP2213642290

Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Natural Resources, LLC (Maverick), has prepared the following *Revised Remediation Work Plan* (RRWP) to document site assessment and soil sampling activities and provide supplemental information requested in the denial of the original *Remediation Work Plan* (RWP), dated October 31, 2022. Maverick received the denial notice from the New Mexico Oil Conservation Division (NMOCD) on November 28, 2022. In the denial, NMOCD stated:

Remediation Plan Denied. The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. Release has not been adequately delineated. Please resubmit a revised Remediation Plan to the OCD portal by December 28, 2022.

Similar to the original RWP, the following RRWP proposes excavation of impacted soil in the top 4 feet, but adds installation of a depth to water boring to confirm the Closure Criteria at the Site to address NMOCD's denial.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit F, Section 20, Township 17 South, Range 32 East, in Lea County, New Mexico (32.820368°N, 103.789382°W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On May 4, 2022, corrosion from an injection line resulted in the release of approximately 30.12 barrels (bbls) of produced water into the pasture where fluids pooled. Approximately 1 bbl of released fluids was recovered. The previous operator, ConocoPhillips Company (COP), immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on May 4, 2022 and submitted a Release Notification Form C-141 (Form C-141) on May 16, 2022. The release was assigned Incident Number NAPP2213642290.

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

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The previous operator, COP, sold the asset to Maverick on June 1, 2022. Field activities at the Site were postponed until the sale of the Site was complete.

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 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Based on the results of the Site Characterization presented in the RWP, the following NMOCD Table I Closure Criteria (Closure Criteria) are applied:

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

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH will be applied to the top 4 feet of the pasture area and lease road that was impacted by the release, per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation.

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On October 19, 2022, personnel completed a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations. Delineation activities were conducted at the Site to assess the vertical extent of the release. Potholes PH01 through PH05 were advanced via hydro-vacuum (hydro-vac) and track-mounted backhoe within the release extent. The delineation potholes were advanced to a depth of approximately 15 feet bgs before encountering refusal. Discrete delineation soil samples were collected from each pothole at depths ranging from 1-foot to 15 feet bgs. Soil from the potholes were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride 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 was completed during the Site visit and a photographic log is included in Appendix B. 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 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 chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH- GRO, TPH- DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for the delineation soil samples PH01 through PH05, indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for the delineation soil samples collected from potholes PH04 and PH05 indicated waste-containing soil is

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present within the top 4 feet of soil off pad. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix C.

PROPOSED REMEDIATION WORK PLAN

Waste-containing soil has been detected in the top 4 feet of soil off pad as indicated potholes PH04 and PH05 to a total depth of 3 feet bgs. As a result, Maverick proposes excavation of waste-containing soil in the top 4 feet.

Maverick requests approval to complete the following remediation activities:

- Excavation of waste-containing soil, specifically soil containing concentrations of chloride greater than 600 mg/kg, in the top 4 feet of soil in areas of non-oil and gas production facilities. Excavation will proceed laterally until sidewall samples indicated chloride concentrations are compliant with the reclamation requirements. Confirmation samples will be collected from the sidewalls of the final excavation extent.
- Sidewall samples will be collected at a frequency of every 200 square feet. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation samples will be analyzed for chloride only.
- Upon completion of excavation activities, if the final depth of the excavation is shallower than 4 feet bgs, discrete samples will be collected to confirm the reclamation requirement has been met on the floor of the excavation.
- An estimated 500 cubic yards of waste-containing soil will be excavated and disposed of at a licensed disposal facility.
- The excavation will be backfilled and recontoured to match pre-existing conditions. The disturbed pasture will be re-seeded with an approved BLM seed mixture.
- In order to verify depth to groundwater is greater than 100 feet bgs at the Site and confirm the applied Closure Criteria, Maverick proposes to complete a depth to water boring within ½ mile of the release. The soil boring will be advanced to a depth of approximately 110 feet bgs or until groundwater is encountered. An Ensolum geologist will log and describe soils continuously and will document observations on a lithologic/soil sampling log. The borehole will be left open for at least 72 hours to allow for the potential slow infill of groundwater. Following the 72-hour waiting period, depth to groundwater will be measured or the Ensolum geologist will confirm the boring is dry. The borehole will be properly abandoned following New Mexico Office of the State Engineer (NMOSE) plugging and abandonment procedures. Maverick will include documentation of the soil boring installation and lithologic/soil sampling log in the subsequent deliverable.

Maverick will complete the excavation activities within 90 days of the date of approval of this RRWP by the NMOCD. A report detailing remedial actions will be submitted within 30 days of receipt of laboratory analytical results and completion of drilling activities. The depth to water soil boring will be completed as soon as possible following approval from the surface landowner, receipt of the NMOSE drilling permit, and scheduling with a driller, which could impact the time to drill based on availability.

Maverick believes the scope of work described above will meet requirements set forth in 19.15.29.13 NMAC and will be protective of human health, the environment, and groundwater. As such, Maverick respectfully requests approval of this RRWP from NMOCD.

Maverick Natural Resources, LLC Revised Remediation Work Plan Elvis Injection Line



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

Sincerely, Ensolum, LLC

Kalei Jennings Senior Scientist Daniel Moir, PG Senior Managing Geologist

cc: Bryce Wagoner, Maverick Natural Resources, LLC

Bureau of Land Management

Appendices:

Figure 1 Site Location Map

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

Appendix B Photographic Log

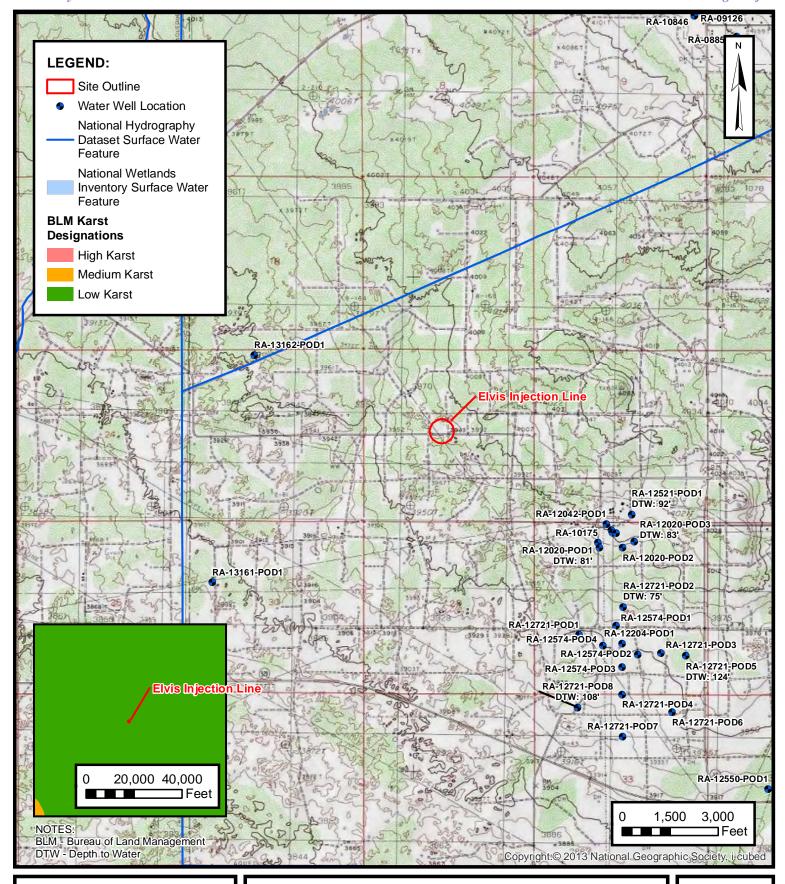
Appendix C Lithologic / Soil Sampling Logs

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

Appendix E Final C-141



FIGURES





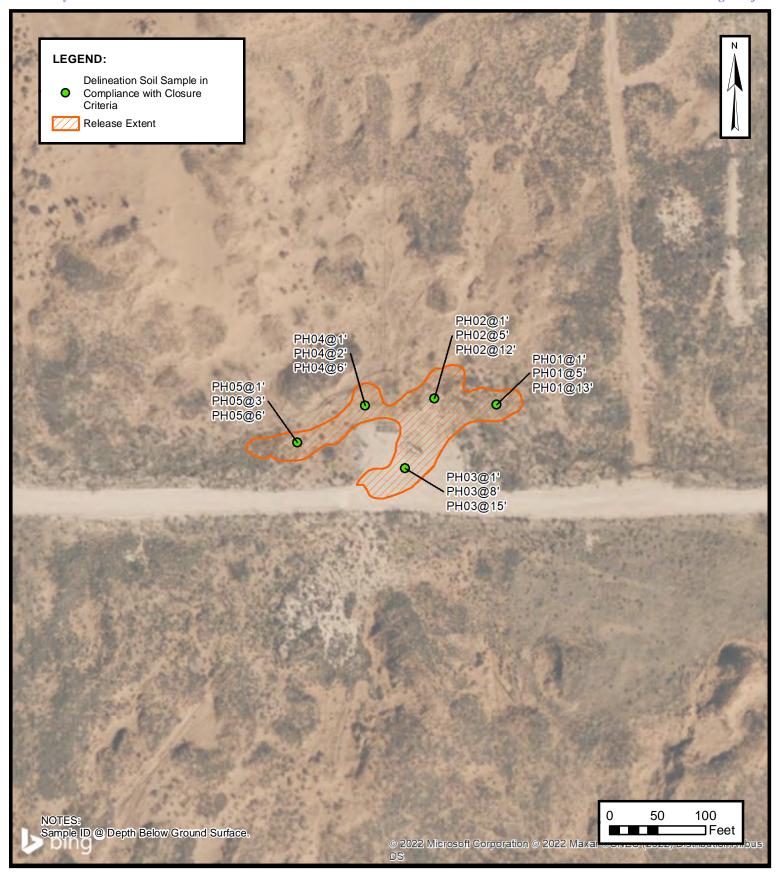
SITE RECEPTOR MAP

MAVERICK NATURAL RESOURCES, LLC ELVIS INJECTION LINE

NAPP2213642290 Unit F, Sec 20, T17S, R32E Lea County, New Mexico FIGURE

1

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DELINEATION SOIL SAMPLE LOCATIONS

MAVERICK NATURAL RESOURCES, LLC ELVIS INJECTION LINE NAPP2213642290

NAPP2213642290 Unit F, Sec 20, T17S, R32E Lea County, New Mexico **FIGURE**

2



TABLES



TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS

Elvis Injection Line Maverick Natural Resources, LLC Lea County, New Mexico

				* **						
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1	Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	10,000
	Delineation Soil Samples									
PH01	10/19/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	242*
PH01	10/19/2022	5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	6,410
PH01	10/19/2022	13	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	787
PH02	10/19/2022	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	165*
PH02	10/19/2022	5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	8,760
PH02	10/19/2022	12	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	1,120
PH03	10/19/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,260
PH03	10/19/2022	8	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,810
PH03	10/19/2022	15	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	4,020
PH04	10/19/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,020*
PH04	10/19/2022	2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	1,560*
PH04	10/19/2022	6	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	162
PH05	10/19/2022	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	403*
PH05	10/19/2022	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,530*
PH05	10/19/2022	6	< 0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	431

Notes:

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

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

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

* indicates sample was collected in area to be reclaimed after remediation is complete; the reclamation criteria applies to these samples



APPENDIX A

Referenced Well Records



Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number Q64 Q16 Q4 Sec Tws Rng

X

RA 12042 POD1

1 28 17S 32E

614891

3631181

Driller License:

1261

Driller Company:

DARRELL CRASS DRILLING CO., INC.

Driller Name:

CRASS, DARRELL (LD)

Drill Start Date:

11/13/2013

Drill Finish Date:

Pipe Discharge Size:

11/22/2013

Plug Date:

Log File Date:

12/12/2013

PCW Rcv Date:

Source:

Pump Type: Casing Size:

10.00

Depth Well:

400 feet

Estimated Yield: Depth Water:

Water Bearing Stratifications:

Top Bottom Description

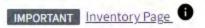
10

30 Sandstone/Gravel/Conglomerate

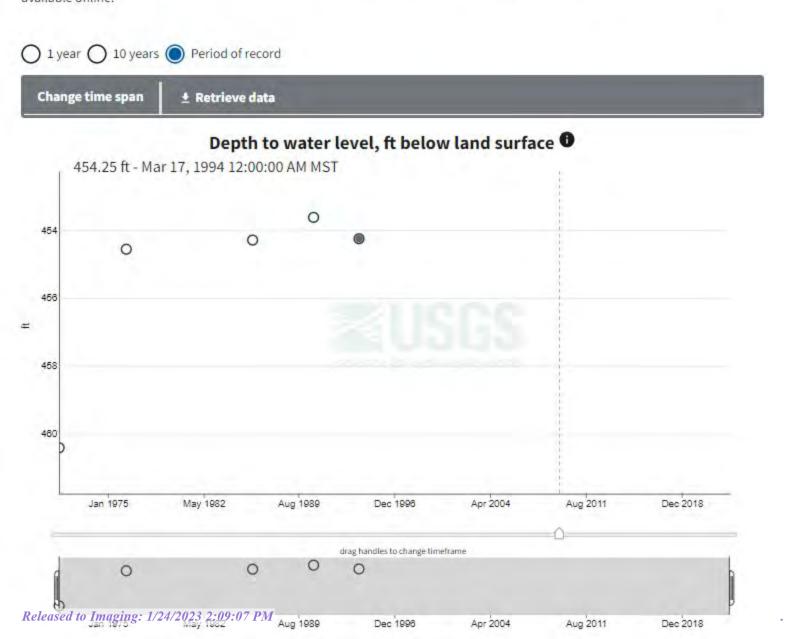
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

7/18/22 9:47 AM

POINT OF DIVERSION SUMMARY



Monitoring location 324600103484601 is associated with a WELL in EDDY COUNTY, NEW MEXICO. Water data back to 1971 are available online.





APPENDIX B

Photographic Log



Photographic Log

Maverick Natural Resources, LLC Elvis Injection Line Incident Number NAPP2213642290





Photograph: 1 Date: 5/5/2022

Description: Soil staining in release footprint

View: Northwest

Photograph: 2 Date: 5/5/2022

Description: Soil staining in release footprint

View: Northwest



Photograph: 3 Date: 10/19/2022

Description: Delineation activities

View: East



Photograph: 4 Date: 10/19/2022

Description: Delineation Activities

View: North



APPENDIX C

Lithologic Soil Sampling Logs

								Sample Name: PH01	Date: 10/19/2022	
-	7			C	OL			Site Name: Elvis Injection Line		
				3				Incident Number: NAPP22136422	90	
								Job Number: 03D2057011		
	I	LITHOL	OGIC	C / SOIL S	AMPLING	LOG		Logged By: CS/PV	Method: Hand Auger	
Coordi	nates: 32.	8204559	, -103	3.7890876				Hole Diameter: 4"	Total Depth: 13'	
			_					PID for chloride and vapor, respecti actors included.	ively. Chloride test	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	scriptions	
					1	<u> </u>				
D	207	0.0	N	PH01	1 -	1	SPSM	SAND, reddish brown, medi poorly graded, no staining	ium to fine grain, g, no odor.	
D	1,646	0.2	Ν		-	2	SPSM	SAA		
D	1,646	0.4	N		- - -	- - - 3	SPSM	SAA		
D	1,316	0.5	N		- -	<u> </u>	SPSM	SAA		
D	1,290	0.2	N	PH01A	5 -	5 	SPSM	SAA		
D	3,589	0.5	N		- -	_ _ 6	SPSM	SAA		
D			N		- -	- - -	SPSM	SAA		
D			N		- - -	8 	SPSM	SAA		
D	10,046	0.2	N		- -	9	SPSM	SAA		
D			N		- -	10	SPSM	SAA		
D			N		- - -	11	SPSM	SAA, more clay		
D	526	0.1	N		- - -	12	SPSC	SAA, some plant matter		
D	526	0.1	N	PH01B	13 -	13 	SPSC	SAA, more clay, no plant ma	atter	
	TD @ 13 FEET BGS									

								Sample Name: PH02 Date: 10/19/2022		
	7									
_			V	3	OL	_ U	V	Incident Number: NAPP2213642290		
								Job Number: 03D2057011		
		LITHOL	OGIO	C / SOIL S	AMPLING	LOG		Logged By: CS/PV Method: Hand Auger		
Coordi				3.7892647				Hole Diameter: 4" Total Depth: 12'		
								PID for chloride and vapor, respectively. Chloride test		
performed with 1:4 dilution factor of soil to distilled water. No correction factor								actors included.		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions		
					1	<u> </u>				
D	207	0.2	N	PH02	1 -	1	SPSM	SAND, reddish brown, medium to fine grain, poorly graded, no staining, no odor.		
D	280	0.2	N		_	2	SPSM	SAA		
D	1,036	0.4	N		- -	- - -	SPSM	SAA		
D	1,316	0.4	N		-	4	SPSM	SAA		
D	9,290	0.5	N	PH02A	5	5	SPSM	SAA		
D	7,341	0.5	N		- -	6	SPSM	SAA, more clay		
D	4,860	0.9	N		- -	- 7 -	SPSM	SAA		
D	7,341	0.3	N		-	8	CCHE	CALICHE		
D			N		-	_ _ 9 _	ССНЕ	SAA		
D			N		- -	10	ССНЕ	SAA		
D	1,215	0.1	N		-	11	CCHE	SAA		
D	1,215	0.1	N	PH02B	12	12	ССНЕ	SAA		
					- - - -	- - -				
						TD @	L 12 FEET	BGS		
ĺ										
l										

								Sample Name: PH03 Date: 10/19/2022
			N	C		U		Site Name: Elvis Injection Line
			V					Incident Number: NAPP2213642290
								Job Number: 03D2057011
	l	LITHOL	OGIC	C / SOIL S	AMPLING	LOG		Logged By: CS/PV Method: Hand Auger
				3.7893491				Hole Diameter: 4" Total Depth: 15'
			_				PID for chloride and vapor, respectively. Chloride test actors included.	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
					1	0		
D	929	0.5	N	PH03	1 -	_ _ 1 _	ССНЕ	CALICHE, well pad poorly graded, no staining, no odor.
D	1,288	0.4	N		- - -	_ 2 -	SPSM	SAND, reddish brown, medium to fine grain, poorly graded, no staining, no odor.
D	2,139	0.5	N		- -	_ _ 3 _	SPSM	SAA
D	2,296	0.4	N		- - -	- _ 4	SPSM	SAA
D			N		_ 	_ _ 5	SPSM	SAA
D	3,707	0.3	N		<u>-</u>	<u> </u>	SPSM	SAA
D			N		_	7	SPSM	SAA
D	19,297	0.3	N	PH03A	8	8	SPSM	SAA
D			N		-	_ _ 9	SPSM	SAA
D	3,544	0.3	N		-	10	SPSC	SAND, reddish brown, poorly graded, medium to
D			N		-	11	SPSC	fine grain, no stain, no odor. SAA
D	5,756	0.5	N		- -	12	SPSC	SAA
D			N		_	13	SPSC	SAA
D			N		- -	14	SPSC	SAA
D	5292	0.3	N	РН03В	15	15	SPSC	SAA
						TD @	15 FEET B	

								Comple Name: DIO4	Doto: 10/10/2022	
7								Sample Name: PH04	Date: 10/19/2022	
1	•		N	S	OI	_ U	M	Site Name: Elvis Injection Line Incident Number: NAPP22136		
ř			_					Job Number: 03D2057011		
		ITHOL	OGI(^ / SOIL S	AMDUNG	106				
Coord	LITHOLOGIC / SOIL SAMPLING LOG Coordinates: 32.8204537, -103.7894618							Logged By: CS/PV Hole Diameter: 4"	Method: Hand Auger Total Depth: 10'	
					th HACH Chl	loride Test S	trips and I	PID for chloride and vapor, resp	·	
			_					actors included.	recurrent, emeride test	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic	Descriptions	
					1	0				
D	2,329	0.3	N	PH04	1 -	1	SPSM	SAND, reddish brown, m poorly graded, no stair		
D	1,764	0.3	Ν	PH04A	2	2	SPSM	SAA		
D	789	0.4	N		- - -	3	SPSM	SAA		
D	1,892	0.2	N		- - -	4	SPSM	SAA		
D			N		- - -	_ _ 5 _	SPSM	SAA		
D	<168	0.3	N	PH04B	6 _	6	SPSM			
D			N		_	7	SPSM	SAA		
D	<168	0.5	N		- - -	8	ССНЕ	CALICHE with sand.		
D			N		- - -	9	ССНЕ	SAA		
D	<168	0.1	N		- - -	10				
		_				TD @	10 FEET	BGS		
		\								
				\						
D <168 0.1 N TD @ 10 FEET BGS										

								Sample Name: PH05	Data: 10/10/2022	
7								Site Name: Elvis Injection Line	Date: 10/19/2022	
			N	5	OL	_ U	M	Incident Number: NAPP22136		
6								Job Number: 03D2057011		
		ITHOL	OGIO	· / SOIL S	AMPLING	LOG		Logged By: CS/PV Method: Hand Auger		
Coordi	Coordinates: 32.8203646, -103.7896556							Hole Diameter: 4"	Total Depth: 10'	
					th HACH Chl	oride Test S	trips and I	PID for chloride and vapor, res	· ·	
performed with 1:4 dilution factor of soil to distilled water. No correction factors included.										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic	Descriptions	
					1	0				
D	414	0.2	N	PH05	1 -	1	SPSM	SAND, reddish brown, n poorly graded, no stail	nedium to fine grain, ning, no odor.	
D	280	0.3	Ν		_	_ 2	SPSM	SAA		
D	5,756	0.3	N	PH05A	3	3	SPSM	SAA		
D	929	0.3	N		- - -	4	SPSM	SAA		
D			N		- - -	5 	SPSM	SAA		
D	526	0.3	N	PH05B	6 _	6 -	SPSM			
D D	856	0.3	Z		- - -	. 7 - . 8	SPSM SPSM			
	850	0.5	14		_	- 0	JI JIVI	JAA		
D			N		- -	- 9 -	SPSM	SAA		
D	364	0.6	N	PH05C	10	10	SPSM	SAA		
						TD @	10 FEET	BGS		
		\								
						7	\			
İ										



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3236-1

Laboratory Sample Delivery Group: 03D2057011

Client Project/Site: Elivis Injection Line

For:

🛟 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

10/28/2022 10:57:43 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for release by:

Have a Question?

EOL

.....LINKS

Review your project results through

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 1/24/2023 2:09:07 PM This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Client: Ensolum
Project/Site: Elivis Injection Line

Laboratory Job ID: 890-3236-1
SDG: 03D2057011

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Definitions/Glossary

Job ID: 890-3236-1 Client: Ensolum Project/Site: Elivis Injection Line SDG: 03D2057011

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

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) MPN Most Probable Number Method Quantitation Limit MQL

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

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

TNTC Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: Ensolum

Project/Site: Elivis Injection Line

Job ID: 890-3236-1 SDG: 03D2057011

Job ID: 890-3236-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3236-1

Receipt

The samples were received on 10/20/2022 9:38 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 3.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH05 (890-3236-1), PH05 (890-3236-2), PH05 (890-3236-3) and PH05 (HOLD) (890-3236-4).

GC VOA

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

GC Semi VOA

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 880-37510 and analytical batch 880-37597 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Matrix: Solid

Lab Sample ID: 890-3236-1

Job ID: 890-3236-1

Client: Ensolum Project/Site: Elivis Injection Line SDG: 03D2057011

Date Collected: 10/19/22 14:00 Date Received: 10/20/22 09:38

Client Sample ID: PH05

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/27/22 09:43	10/27/22 21:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/27/22 09:43	10/27/22 21:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/27/22 09:43	10/27/22 21:48	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/27/22 09:43	10/27/22 21:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/27/22 09:43	10/27/22 21:48	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/27/22 09:43	10/27/22 21:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130			10/27/22 09:43	10/27/22 21:48	1
1,4-Difluorobenzene (Surr)	99		70 - 130			10/27/22 09:43	10/27/22 21:48	1
Method: TAL SOP Total BTEX - T	otal BTEX Cal	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/28/22 10:42	1
Method: SW846 8015 NM - Diese Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/24/22 12:22	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		10/21/22 13:46	10/22/22 05:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/22/22 05:16	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/22/22 05:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			10/21/22 13:46	10/22/22 05:16	1
o-Terphenyl	83		70 - 130			10/21/22 13:46	10/22/22 05:16	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	ography - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: PH05 Lab Sample ID: 890-3236-2

5.04

mg/Kg

403 F1

Date Collected: 10/19/22 14:10 Date Received: 10/20/22 09:38

Sample Depth: 3

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/27/22 09:43	10/27/22 22:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/27/22 09:43	10/27/22 22:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/27/22 09:43	10/27/22 22:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/27/22 09:43	10/27/22 22:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/27/22 09:43	10/27/22 22:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/27/22 09:43	10/27/22 22:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/27/22 09:43	10/27/22 22:09	1

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10/23/22 17:06

Matrix: Solid

Matrix: Solid

Job ID: 890-3236-1

Project/Site: Elivis Injection Line SDG: 03D2057011 **Client Sample ID: PH05** Lab Sample ID: 890-3236-2

Date Collected: 10/19/22 14:10 Date Received: 10/20/22 09:38

Sample Depth: 3

Client: Ensolum

Method: SW846 8021B - Volatile	Organic Compounds	(GC) (Continued)
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Surrogate	%Recovery C	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99	70 - 130	10/27/22 09:43	10/27/22 22:09	1

Method: TAL SOP	Total RTFX - Total	RTFX Calculation
Mictiliou. IAL OOI	TOTAL DIEX - TOTAL	DIEA Galcalation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/28/22 10:42	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (0	н						
	ı	Mothod: CIMOAC ODAE NIM	Discal Banga	Organica	(DDO)		١.
	н	MELITOU. SYVO40 OUTS INIVI-	· Diesei Kaliue	Organics	IURUI	uu	

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			10/24/22 12:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/22/22 04:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/22/22 04:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/22/22 04:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87	70 - 130	10/21/22 13:46	10/22/22 04:33	1
o-Terphenyl	104	70 - 130	10/21/22 13:46	10/22/22 04:33	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4530		25.0	mg/Kg			10/23/22 17:20	5

Client Sample ID: PH05 Lab Sample ID: 890-3236-3

Date Collected: 10/19/22 14:20 Date Received: 10/20/22 09:38

Sample Depth: 6

1,4-Difluorobenzene (Surr)

ı	Method: SW846 8021B	Valatila Ossasia	O = (OO)

Method. Syvoto 002 ID - Volat	ne Organic Comp	ounus (OC))					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/27/22 09:43	10/27/22 22:29	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/27/22 09:43	10/27/22 22:29	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/27/22 09:43	10/27/22 22:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/27/22 09:43	10/27/22 22:29	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/27/22 09:43	10/27/22 22:29	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/27/22 09:43	10/27/22 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			10/27/22 09:43	10/27/22 22:29	1

ı								
ı	Method: T	AL SOE	Total F	TEY_	Total B	TEY C	doulation	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/28/22 10:42	1

70 - 130

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 12:22	1

Eurofins Carlsbad

10/27/22 22:29

10/27/22 09:43

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3236-1 Project/Site: Elivis Injection Line SDG: 03D2057011

Client Sample ID: PH05

Date Received: 10/20/22 09:38

Lab Sample ID: 890-3236-3 Date Collected: 10/19/22 14:20

Matrix: Solid

Sample Depth: 6

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 04:55	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 04:55	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 04:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			10/21/22 13:46	10/22/22 04:55	1
o-Terphenyl	108		70 - 130			10/21/22 13:46	10/22/22 04:55	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - S	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Surrogate Summary

Client: Ensolum

Project/Site: Elivis Injection Line

Job ID: 890-3236-1

SDG: 03D2057011

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3236-1	PH05	112	99	
890-3236-2	PH05	115	99	
890-3236-3	PH05	116	93	
890-3252-A-2-B MS	Matrix Spike	114	101	
890-3252-A-2-C MSD	Matrix Spike Duplicate	125	93	
LCS 880-37686/1-A	Lab Control Sample	111	98	
LCS 880-37987/1-A	Lab Control Sample	96	96	
LCSD 880-37686/2-A	Lab Control Sample Dup	111	94	
LCSD 880-37987/2-A	Lab Control Sample Dup	104	101	
MB 880-37987/5-A	Method Blank	111	106	

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	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3236-1	PH05	75	83	
890-3236-2	PH05	87	104	
890-3236-3	PH05	90	108	
890-3237-A-1-B MS	Matrix Spike	84	91	
890-3237-A-1-C MSD	Matrix Spike Duplicate	83	89	
LCS 880-37501/2-A	Lab Control Sample	97	120	
LCSD 880-37501/3-A	Lab Control Sample Dup	96	116	
MB 880-37501/1-A	Method Blank	90	108	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Carlsbad

Job ID: 890-3236-1 Client: Ensolum Project/Site: Elivis Injection Line SDG: 03D2057011

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: LCS 880-37686/1-A

Matrix: Solid Analysis Batch: 37962 **Client Sample ID: Lab Control Sample**

Prep Type: Total/NA Prep Batch: 37686

		Spike	LCS	LCS				%Rec	
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	0.100	0.08480		mg/Kg		85	70 - 130	
	Toluene	0.100	0.09591		mg/Kg		96	70 - 130	
	Ethylbenzene	0.100	0.08819		mg/Kg		88	70 - 130	
	m-Xylene & p-Xylene	0.200	0.1857		mg/Kg		93	70 - 130	
	o-Xylene	0.100	0.1003		mg/Kg		100	70 - 130	
ı									

LCS LCS %Recovery Qualifier

Surrogate Limits 70 - 130 4-Bromofluorobenzene (Surr) 111 1,4-Difluorobenzene (Surr) 98 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37686

Analysis Batch: 37962

Matrix: Solid

Lab Sample ID: LCSD 880-37686/2-A

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09111		mg/Kg		91	70 - 130	7	35
Toluene	0.100	0.1067		mg/Kg		107	70 - 130	11	35
Ethylbenzene	0.100	0.09617		mg/Kg		96	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2029		mg/Kg		101	70 - 130	9	35
o-Xylene	0.100	0.1086		mg/Kg		109	70 - 130	8	35

LCSD LCSD %Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 111 70 - 130 1,4-Difluorobenzene (Surr) 94 70 - 130

Lab Sample ID: 890-3252-A-2-B MS

Matrix: Solid

o-Xylene

Analysis Batch: 37962

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 37686

Sample Sample Spike MS MS Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Benzene <0.00201 U 0.0998 0.09028 mg/Kg 90 70 - 130 Toluene <0.00201 U 0.0998 0.09150 mg/Kg 92 70 - 130 Ethylbenzene <0.00201 U 0.0998 0.08339 mg/Kg 84 70 - 130 m-Xylene & p-Xylene <0.00402 U 0.200 0.1745 mg/Kg 87 70 - 130

0.09453

mg/Kg

0.0998

MS MS

<0.00201 U

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-3252-A-2-C MSD

Matrix: Solid

Analysis Batch: 37962

Client Sample ID: Matrix Spike Duplicate

70 - 130

Prep Type: Total/NA

Prep Batch: 37686

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0990	0.06966		mg/Kg		70	70 - 130	26	35
Toluene	<0.00201	U	0.0990	0.08940		mg/Kg		90	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0990	0.08208		mg/Kg		83	70 - 130	2	35

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Job ID: 890-3236-1 Client: Ensolum Project/Site: Elivis Injection Line SDG: 03D2057011

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

Lab Sample ID: 890-3252-A-2-C MSD

Matrix: Solid Analysis Batch: 37962 Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 37686

Sample Sample Spike MSD MSD %Rec **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit D < 0.00402 U 0.198 0.1737 88 70 - 130 35 m-Xylene & p-Xylene mg/Kg 0 o-Xylene <0.00201 0.0990 0.09585 mg/Kg 97 70 - 130 35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	125	70 - 130
1,4-Difluorobenzene (Surr)	93	70 - 130

Lab Sample ID: MB 880-37987/5-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 37962

Prep Type: Total/NA

Prep Batch: 37987

мв мв Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene <0.00200 0.00200 mg/Kg 10/27/22 09:43 10/27/22 14:04 Toluene <0.00200 U 0.00200 mg/Kg 10/27/22 09:43 10/27/22 14:04 Ethylbenzene <0.00200 U 0.00200 mg/Kg 10/27/22 09:43 10/27/22 14:04 m-Xylene & p-Xylene <0.00400 U 0.00400 10/27/22 09:43 10/27/22 14:04 mg/Kg o-Xylene <0.00200 U 0.00200 mg/Kg 10/27/22 09:43 10/27/22 14:04 <0.00400 U 0.00400 10/27/22 09:43 10/27/22 14:04 Xylenes, Total mg/Kg

MR MR

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111	70 - 130	10/27/22 09:43	10/27/22 14:04	1
1,4-Difluorobenzene (Surr)	106	70 - 130	10/27/22 09:43	10/27/22 14:04	1

Lab Sample ID: LCS 880-37987/1-A

Matrix: Solid

Analysis Batch: 37962

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

Prep Batch: 37987

%Rec
lifier Unit D %Rec Limits
mg/Kg 91 70 - 130
mg/Kg 97 70 ₋ 130
mg/Kg 86 70 - 130
mg/Kg 89 70 - 130
mg/Kg 93 70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	96	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

Lab Sample ID: LCSD 880-37987/2-A

Released to Imaging: 1/24/2023 2:09:07 PM

Matrix: Solid

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 37962

Client Sample ID: Lab Control Samp	lo Dun

107

%Rec

70 - 130

Prep Type: Total/NA

Prep Batch: 37987

RPD

35

Limits Limit Added Result Qualifier RPD Unit %Rec 0.100 0.1002 mg/Kg 100 70 - 130 10 35 0.100 0.1110 mg/Kg 111 70 - 13014 35 0.100 0.09703 mg/Kg 97 70 - 130 12 35 0.200 0.2041 mg/Kg 102 70 - 130 14 35

mg/Kg

LCSD LCSD

0.1074

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14

Spike

0.100

Client: Ensolum

Project/Site: Elivis Injection Line

Job ID: 890-3236-1

SDG: 03D2057011

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

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

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

Lab Sample ID: MB 880-37501/1-	A					Client Sa	mple ID: Metho	d Blank
Matrix: Solid							Prep Type: 1	Total/NA
Analysis Batch: 37440							Prep Batch	n: 37501
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/21/22 20:18	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/21/22 20:18	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/21/22 20:18	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			10/21/22 13:46	10/21/22 20:18	1
o-Terphenyl	108		70 - 130			10/21/22 13:46	10/21/22 20:18	1

Lab Sample ID: LCS 880-37501/2-A	Client Sample ID: Lab Control Sample
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 37440	Prep Batch: 37501

7 maryoro Batom or 110									uto
		Spike	LCS	LCS				%Rec	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10		1000	1112		mg/Kg		111	70 - 130	
Diesel Range Organics (Over C10-C28)		1000	1053		mg/Kg		105	70 - 130	
	LCS LCS								

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenvl	120		70 - 130

Lab Sample ID: LCSD 880-37501/3-A	Client Sample ID: Lab Control Sample Dup
Matrix: Solid	Prep Type: Total/NA

•	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	950.0		mg/Kg		95	70 - 130	16	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1029		mg/Kg		103	70 - 130	2	20
C10-C28)									

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	116		70 - 130

Eurofins Carlsbad

Prep Batch: 37501

Analysis Batch: 37440

Client: Ensolum Job ID: 890-3236-1 Project/Site: Elivis Injection Line SDG: 03D2057011

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

Lab Sample ID: 890-3237-A-1-B MS

Matrix: Solid

Analysis Batch: 37440

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 37501

Sample Sample Spike MS MS Result Qualifier Analyte babbA Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.8 U 998 1078 mg/Kg 105 70 - 130 (GRO)-C6-C10 998 Diesel Range Organics (Over 1006 mg/Kg 87 70 - 130 133

C10-C28)

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 890-3237-A-1-C MSD

Matrix: Solid

Analysis Batch: 37440

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 37501

	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	<49.8	U	998	1136		mg/Kg		111	70 - 130	5	20
Diesel Range Organics (Over	133		998	1003		mg/Kg		87	70 - 130	0	20

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	89		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37510/1-A

Matrix: Solid

Analysis Batch: 37597

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

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 10/23/22 16:51 mg/Kg

Lab Sample ID: LCS 880-37510/2-A **Matrix: Solid**

MB MB

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Analysis Batch: 37597

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 258.4 103 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-37510/3-A

Released to Imaging: 1/24/2023 2:09:07 PM

Matrix: Solid

Analysis Batch: 37597									
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	255.9		mg/Kg		102	90 - 110	1	20

Eurofins Carlsbad

Client: Ensolum Job ID: 890-3236-1 Project/Site: Elivis Injection Line

SDG: 03D2057011

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3236-1 MS **Client Sample ID: PH05 Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37597

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	403	F1	252	626.5	F1	mg/Kg		89	90 - 110		_

Lab Sample ID: 890-3236-1 MSD **Client Sample ID: PH05 Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37597

Sample Sample Spike MSD MSD %Rec RPD RPD Limit Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec Chloride 403 F1 252 629.1 mg/Kg 90 90 - 110 0

QC Association Summary

Client: Ensolum

Project/Site: Elivis Injection Line

Job ID: 890-3236-1

SDG: 03D2057011

GC VOA

Prep Batch: 37686

Lab Sample ID LCS 880-37686/1-A	Client Sample ID Lab Control Sample	Prep Type Total/NA	Solid	Method 5035	Prep Batch
LCSD 880-37686/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3252-A-2-B MS	Matrix Spike	Total/NA	Solid	5035	
890-3252-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 37962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3236-1	PH05	Total/NA	Solid	8021B	37987
890-3236-2	PH05	Total/NA	Solid	8021B	37987
890-3236-3	PH05	Total/NA	Solid	8021B	37987
MB 880-37987/5-A	Method Blank	Total/NA	Solid	8021B	37987
LCS 880-37686/1-A	Lab Control Sample	Total/NA	Solid	8021B	37686
LCS 880-37987/1-A	Lab Control Sample	Total/NA	Solid	8021B	37987
LCSD 880-37686/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37686
LCSD 880-37987/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37987
890-3252-A-2-B MS	Matrix Spike	Total/NA	Solid	8021B	37686
890-3252-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	37686

Prep Batch: 37987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3236-1	PH05	Total/NA	Solid	5035	
890-3236-2	PH05	Total/NA	Solid	5035	
890-3236-3	PH05	Total/NA	Solid	5035	
MB 880-37987/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37987/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37987/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 38085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3236-1	PH05	Total/NA	Solid	Total BTEX	
890-3236-2	PH05	Total/NA	Solid	Total BTEX	
890-3236-3	PH05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 37440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3236-1	PH05	Total/NA	Solid	8015B NM	37501
890-3236-2	PH05	Total/NA	Solid	8015B NM	37501
890-3236-3	PH05	Total/NA	Solid	8015B NM	37501
MB 880-37501/1-A	Method Blank	Total/NA	Solid	8015B NM	37501
LCS 880-37501/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37501
LCSD 880-37501/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37501
890-3237-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	37501
890-3237-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37501

Prep Batch: 37501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3236-1	PH05	Total/NA	Solid	8015NM Prep	_
890-3236-2	PH05	Total/NA	Solid	8015NM Prep	
890-3236-3	PH05	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Elivis Injection Line
Job ID: 890-3236-1
SDG: 03D2057011

GC Semi VOA (Continued)

Prep Batch: 37501 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Bar	tch
MB 880-37501/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37501/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37501/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3237-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3237-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3236-1	PH05	Total/NA	Solid	8015 NM	
890-3236-2	PH05	Total/NA	Solid	8015 NM	
890-3236-3	PH05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3236-1	PH05	Soluble	Solid	DI Leach	
890-3236-2	PH05	Soluble	Solid	DI Leach	
890-3236-3	PH05	Soluble	Solid	DI Leach	
MB 880-37510/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37510/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37510/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3236-1 MS	PH05	Soluble	Solid	DI Leach	
890-3236-1 MSD	PH05	Soluble	Solid	DI Leach	

Analysis Batch: 37597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3236-1	PH05	Soluble	Solid	300.0	37510
890-3236-2	PH05	Soluble	Solid	300.0	37510
890-3236-3	PH05	Soluble	Solid	300.0	37510
MB 880-37510/1-A	Method Blank	Soluble	Solid	300.0	37510
LCS 880-37510/2-A	Lab Control Sample	Soluble	Solid	300.0	37510
LCSD 880-37510/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37510
890-3236-1 MS	PH05	Soluble	Solid	300.0	37510
890-3236-1 MSD	PH05	Soluble	Solid	300.0	37510

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Job ID: 890-3236-1

Client: Ensolum Project/Site: Elivis Injection Line SDG: 03D2057011

Client Sample ID: PH05 Lab Sample ID: 890-3236-1 Date Collected: 10/19/22 14:00 Matrix: Solid Date Received: 10/20/22 09:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	37987	10/27/22 09:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37962	10/27/22 21:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38085	10/28/22 10:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			37668	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 05:16	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 17:06	CH	EET MID

Client Sample ID: PH05 Lab Sample ID: 890-3236-2 Date Collected: 10/19/22 14:10 Matrix: Solid

Date Received: 10/20/22 09:38

	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	37987	10/27/22 09:43	MNR	EET MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	37962	10/27/22 22:09	MNR	EET MIC
Total/NA	Analysis	Total BTEX		1			38085	10/28/22 10:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			37668	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37501	10/21/22 13:46	DM	EET MIC
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 04:33	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37510	10/21/22 14:10	KS	EET MIC
Soluble	Analysis	300.0		5	50 mL	50 mL	37597	10/23/22 17:20	CH	EET MIC

Client Sample ID: PH05 Lab Sample ID: 890-3236-3 Date Collected: 10/19/22 14:20

Date Received: 10/20/22 09:38

	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	37987	10/27/22 09:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37962	10/27/22 22:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38085	10/28/22 10:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			37668	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 04:55	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 17:25	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Matrix: Solid

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-3236-1 Project/Site: Elivis Injection Line

SDG: 03D2057011

Laboratory: Eurofins Midland

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

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

Method Summary

Client: Ensolum Job ID: 890-3236-1
Project/Site: Elivis Injection Line SDG: 03D2057011

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

Protocol References:

DI Leach

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Deionized Water Leaching Procedure

Laboratory References:

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

Eurofins Carlsbad

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EET MID

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Sample Summary

Client: Ensolum

Project/Site: Elivis Injection Line

Job ID: 890-3236-1

SDG: 03D2057011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3236-1	PH05	Solid	10/19/22 14:00	10/20/22 09:38	1
890-3236-2	PH05	Solid	10/19/22 14:10	10/20/22 09:38	3
890-3236-3	PH05	Solid	10/19/22 14:20	10/20/22 09:38	6

Date/Time

Chain of Custody

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

Environment Testing

eurofins

Xenco

Work Order No:

Project Manager:	Kalei Jennings			Bill to: (if different)	fferent)	X	Kalei Jennings	sbu				Work Order Comments	S
Company Name:	Ensolum, LLC			Company Name:	Name:	ū	Ensolum, LLC	의			Program: UST/PST	Program: UST/PST 🗌 PRP 🗌 Brownfields 🗍 RRC 📋 Superfund 📙	RRC Superfund
Address:	601 N Marienfeld St Suite 400	uite 400		Address:		9	1 N Mar	enfeld	601 N Marienfeld St Suite 400	0	State of Project:		I
City, State ZIP.	Midland, TX 70701			City, State ZIP	ZIP:	Z	Midland, TX 79701	× 7970			Reporting: Level II	Reporting: Level II	TRRP Level IV
Phone:			Email:	Email: kjennings@ensolum.com	@ens	olum.cc	E				Deliverables: EDD	ADaPT [Other
Project Name:	Elvis Injection Line	Line	Turn	Turn Around						ANALYSIS REQUEST	EQUEST	Pre	Preservative Codes
Project Number:	03D2057011	1	✓ Routine	□ Rush		Pres. Code						None: NO	DI Water: H ₂ O
Project Location:			Due Date:									Cool: Cool	
Sampler's Name:	Conner Shore	e e	TAT starts the day received by	e day receiv	od by					_	_	HCL: HC	
PO#:			the lab, if received by 4.30pm	served by 4.	E do	SIG		_				H ₂ SU4: H ₂	NaOH: Na
SAMPLE RECEIPT		(Ses) No	Wet lce:	Wes 1	No	-	10.		_			H₃PO4: HP	_
Samples Received Intact:	Infact: (Kes No	Thermometer ID:	ter ID:	TOME	BD-7	300	000		77			NaHSO4: NABIS	NABIS
Cooler Custody Seals:	×	Correction Factor:	Factor:	~D.	9		. بر.					Na ₂ S ₂ O ₃ : NaSO ₃	NaSO ₃
Sample Custody Seals:	Yes No	N/A Temperature Reading:	e Reading:	3	S	.a/ 3	-1-	_		890-3236 Ch	890-3236 Chain of Custody	Zn Acetat	Zn Acetate+NaOH: Zn
Total Containers:		Corrected	Corrected Temperature:	W	و	J-Jul		1001	-	_	-	NaOH+As	NaOH+Ascorbic Acid: SAPC
Sample Identification	ntification Matrix	Date Sampled	Time	Depth	Grab/ #	Cont # Of	яолно ТРН (80	3) X3T8				San	Sample Comments
PH05	S S	10.19.22	1400	1-	ß	-	×	×					
PH05	S S	10.19.22	1410	3,	ß	1	×	×					
PH05	S S	10.19.22	1420	.9	g	-	×	×				ı	Incident Number
PH05 (HOLD)	HOLD) S	10.19.22	1430	10,	g	1	×	×				HOLD P	HOLD PENDING 6' SAMPLE
		900	1										
	0												
1													
2													
						-							
Total 200.7 / 6010	010 200.8 / 6020:		BRCRA 13F	13PPM Texas 1	-	Al Sb	Sb As Ba	Be B	Cd Ca	Or Co Cu Fe F	Cr Co Cu Fe Pb Mg Mn Mo Ni K	Se Ag SiO ₂ Na Sr Ti Sn U V Zn	Sn U V Zn
Sircle Method(s)	Circle Method(s) and Metal(s) to be analyzed	zed	TCLP / S	TCLP / SPLP 6010:	: 8RCRA	RA Sb	As Ba	Be	Cd Cr Co	Cu Pb Mn Mo Ni	Ni Se Ag TI U	Hg: 1631 / 245.1 / 7470 / 747	470 / 7471

Received by: (Signature) of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Relinquished by: (Signature) FC/06/01 Date/Time Received by: (Signature) Relinquished by: (Signature)

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3236-1 SDG Number: 03D2057011

Login Number: 3236 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3236-1 SDG Number: 03D2057011

Login Number: 3236 **List Source: Eurofins Midland** List Number: 2 List Creation: 10/21/22 10:46 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").





Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3238-1

Laboratory Sample Delivery Group: 03D2057011

Client Project/Site: Elivis Injection Line

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/26/2022 9:08:04 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: Elivis Injection Line

Laboratory Job ID: 890-3238-1
SDG: 03D2057011

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Definitions/Glossary

Job ID: 890-3238-1 Client: Ensolum Project/Site: Elivis Injection Line

SDG: 03D2057011

Qualifiers

GC VOA Qualifier

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

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: Elivis Injection Line

Job ID: 890-3238-1

SDG: 03D2057011

Job ID: 890-3238-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3238-1

Receipt

The samples were received on 10/20/2022 9:38 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 3.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH04 (890-3238-1), PH04 (890-3238-2) and PH04 (890-3238-3).

GC VOA

Method 8021B: The following sample was diluted due to the nature of the sample matrix: (880-20579-A-11-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-37510 and analytical batch 880-37597 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.

Job ID: 890-3238-1

Client: Ensolum Project/Site: Elivis Injection Line SDG: 03D2057011

Client Sample ID: PH04 Lab Sample ID: 890-3238-1 Date Collected: 10/19/22 10:00 Matrix: Solid

Date Received: 10/20/22 09:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 04:42	1
Toluene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 04:42	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 04:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/24/22 13:20	10/26/22 04:42	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 04:42	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/24/22 13:20	10/26/22 04:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/24/22 13:20	10/26/22 04:42	1
1,4-Difluorobenzene (Surr)	92		70 - 130			10/24/22 13:20	10/26/22 04:42	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			10/26/22 09:33	
: Method: SW846 8015 NM - Diese	•	ics (DRO) (GC)					
Analyte	Result	ics (DRO) (GC)	Unit	D	Prepared	Analyzed	
Analyte	•	ics (DRO) (GC)		<u>D</u>	Prepared		
	Result <49.9	ics (DRO) (Gualifier	RL 49.9	Unit	<u>D</u>	Prepared	Analyzed	
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.9 sel Range Orga	ics (DRO) (Gualifier	RL 49.9	Unit	<u>D</u>	Prepared Prepared	Analyzed	1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.9 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)	Unit mg/Kg	=		Analyzed 10/24/22 12:22	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 sel Range Orga Result	ics (DRO) ((Qualifier U nics (DRO) Qualifier U	RL 49.9 (GC)	Unit mg/Kg	=	Prepared	Analyzed 10/24/22 12:22 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 sel Range Orga Result <49.9	ics (DRO) ((Qualifier U nics (DRO) Qualifier U	(GC) RL 49.9 (GC) RL 49.9	Unit mg/Kg Unit mg/Kg	=	Prepared 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 03:27	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	ics (DRO) (COMPANIES (DRO)) Qualifier U Qualifier U U U	(GC) RL 49.9 (GC) RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/21/22 13:46 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 03:27 10/22/22 03:27	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	ics (DRO) (COMPANIES (DRO)) Qualifier U Qualifier U U U	GC) RL 49.9 (GC) RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/21/22 13:46 10/21/22 13:46 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 03:27 10/22/22 03:27 10/22/22 03:27	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 <49.9	ics (DRO) (COMPANIES (DRO)) Qualifier U Qualifier U U U	GC) RL 49.9 (GC) RL 49.9 49.9 49.9 Limits	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/21/22 13:46 10/21/22 13:46 10/21/22 13:46 Prepared	Analyzed 10/24/22 12:22 Analyzed 10/22/22 03:27 10/22/22 03:27 10/22/22 03:27 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	ics (DRO) ((Qualifier U) nics (DRO) Qualifier U U Qualifier	GC) RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/21/22 13:46 10/21/22 13:46 10/21/22 13:46 Prepared 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 03:27 10/22/22 03:27 Analyzed 10/22/22 03:27	1 Dil Fac 1 1
Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	ics (DRO) ((Qualifier U) nics (DRO) Qualifier U U Qualifier	GC) RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/21/22 13:46 10/21/22 13:46 10/21/22 13:46 Prepared 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 03:27 10/22/22 03:27 Analyzed 10/22/22 03:27	1 1 Dil Fac

Client Sample ID: PH04 Lab Sample ID: 890-3238-2

Date Collected: 10/19/22 10:15 Date Received: 10/20/22 09:38

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 05:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 05:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 05:03	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/24/22 13:20	10/26/22 05:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 05:03	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/24/22 13:20	10/26/22 05:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/24/22 13:20	10/26/22 05:03	1

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Matrix: Solid

Job ID: 890-3238-1

SDG: 03D2057011

Client Sample ID: PH04

Project/Site: Elivis Injection Line

Date Collected: 10/19/22 10:15 Date Received: 10/20/22 09:38 Lab Sample ID: 890-3238-2 Matrix: Solid

Sample Depth: 2

Client: Ensolum

Method: SW846 8021B	- Volatile Organic	Compounds	(GC) (Continued)
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Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99	70 - 130	10/24/22 13:20	10/26/22 05:03	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			10/26/22 09:33	1

Method: SW846 8015 NM - Die	cal Pango Organico (DDO) (CC	Α.
Method. 344046 6013 MM - Die	sei Railye Organics (DRO) (GC	•

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 12:22	1

	Mothod: SW046 904ED NM Diocol Dan	go Organico (DBO) (CC)	v
ı	Method: SW846 8015B NM - Diesel Ran	ge Organics (DRO) (GC)	,

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 03:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 03:49	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 03:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	10/21/22	2 13:46	10/22/22 03:49	1
o-Terphenyl	105		70 - 130	10/21/22	2 13:46	10/22/22 03:49	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1560		24.8	mg/Kg			10/23/22 18:04	5

Client Sample ID: PH04 Lab Sample ID: 890-3238-3

Date Collected: 10/19/22 10:30 Date Received: 10/20/22 09:38

Sample Depth: 6

н	Method: SW846 803	04D V-1-41-	O	
н	METHOD: SWX46 XII	71B - VOIATIIE	Organic Comp	Allinas (Gal.)

Michiga. Offoro COZ ID - Volati	ne organie oomp	ounus (CC)	,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 05:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 05:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 05:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/24/22 13:20	10/26/22 05:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 05:23	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/24/22 13:20	10/26/22 05:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			10/24/22 13:20	10/26/22 05:23	1
1,4-Difluorobenzene (Surr)	99		70 - 130			10/24/22 13:20	10/26/22 05:23	1

Mothod:	TAI	SOP	Total	RTEY	- Total	RTEY	Calculation	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	mg/Kg			10/26/22 09:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 12:22	1

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Matrix: Solid

Matrix: Solid

Lab Sample ID: 890-3238-3

Client Sample Results

Client: Ensolum
Project/Site: Elivis Injection Line
Job ID: 890-3238-1
SDG: 03D2057011

Client Sample ID: PH04

Date Collected: 10/19/22 10:30 Date Received: 10/20/22 09:38

Sample Depth: 6

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 04:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 04:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 04:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			10/21/22 13:46	10/22/22 04:11	1
o-Terphenyl	99		70 - 130			10/21/22 13:46	10/22/22 04:11	1

Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	162		5.00	mg/Kg			10/23/22 18:09	1

5

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10

13

14

Surrogate Summary

Client: Ensolum Job ID: 890-3238-1 Project/Site: Elivis Injection Line SDG: 03D2057011

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)	
380-20579-A-11-C MS	Matrix Spike	89	99	
880-20579-A-11-D MSD	Matrix Spike Duplicate	97	105	
890-3238-1	PH04	115	92	
390-3238-2	PH04	101	99	
390-3238-3	PH04	95	99	
LCS 880-37678/1-A	Lab Control Sample	92	101	
LCSD 880-37678/2-A	Lab Control Sample Dup	94	96	
MB 880-37517/5-A	Method Blank	109	105	
MB 880-37678/5-A	Method Blank	108	106	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr) Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3237-A-1-B MS	Matrix Spike	84	91	
890-3237-A-1-C MSD	Matrix Spike Duplicate	83	89	
890-3238-1	PH04	75	86	
890-3238-2	PH04	94	105	
890-3238-3	PH04	83	99	
LCS 880-37501/2-A	Lab Control Sample	97	120	
LCSD 880-37501/3-A	Lab Control Sample Dup	96	116	
MB 880-37501/1-A	Method Blank	90	108	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-3238-1 SDG: 03D2057011 Project/Site: Elivis Injection Line

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37517/5-A

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37517

1

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Toluene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/21/22 14:22	10/25/22 11:26	
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/21/22 14:22	10/25/22 11:26	

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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	10/21/22 14:2	2 10/25/22 11:26	1
1,4-Difluorobenzene (Surr)	105		70 - 130	10/21/22 14:2	2 10/25/22 11:26	1

Lab Sample ID: MB 880-37678/5-A

Matrix: Solid

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

Prep Batch: 37678

Analysis Batch: 37728

	MD	MID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/24/22 13:20	10/25/22 23:00	1
1,4-Difluorobenzene (Surr)	106		70 - 130	10/24/22 13:20	10/25/22 23:00	1

Lab Sample ID: LCS 880-37678/1-A

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 37678

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1004		mg/Kg		100	70 - 130	
Toluene	0.100	0.1057		mg/Kg		106	70 - 130	
Ethylbenzene	0.100	0.09437		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	0.200	0.1930		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.1024		mg/Kg		102	70 - 130	

LCS LCS

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	92	70 - 130
1.4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-37678/2-A

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Lab	Control Sample Dup
	Dren Trees Total/NA

Prep Type: Total/NA

Prep Batch: 37678

	Бріке	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09898	mg/Kg		99	70 - 130	1	35

QC Sample Results

Client: Ensolum Job ID: 890-3238-1 Project/Site: Elivis Injection Line SDG: 03D2057011

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

Lab Sample ID: LCSD 880-37678/2-A

Matrix: Solid Analysis Batch: 37728 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 37678

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.1070		mg/Kg		107	70 - 130	1	35
Ethylbenzene	0.100	0.09688		mg/Kg		97	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1994		mg/Kg		100	70 - 130	3	35
o-Xylene	0.100	0.1064		mg/Kg		106	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-20579-A-11-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 37728** Prep Batch: 37678

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1 F2	0.0998	0.1091		mg/Kg		109	70 - 130	
Toluene	<0.00200	U F1 F2	0.0998	0.1041		mg/Kg		104	70 - 130	
Ethylbenzene	<0.00200	U F1 F2	0.0998	0.07417		mg/Kg		74	70 - 130	
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.200	0.1392		mg/Kg		70	70 - 130	
o-Xylene	<0.00200	U F1 F2	0.0998	0.08216		mg/Kg		82	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	89	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 880-20579-A-11-D MSD

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 37678

Sample Sample Spike MSD MSD RPD %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Benzene <0.00200 U F1 F2 0.101 0.002336 F1 F2 70 - 130 192 35 mg/Kg Toluene <0.00200 U F1 F2 0.101 0.004596 F1 F2 mg/Kg 5 70 - 130 183 35 Ethylbenzene <0.00200 UF1F2 0.101 0.004565 F1 F2 mg/Kg 5 70 - 130 177 35 5 <0.00401 U F1 F2 0.201 0.01034 F1 F2 70 - 130 172 m-Xylene & p-Xylene mg/Kg 35 0.101 0.005707 F1 F2 70 - 130 o-Xylene <0.00200 U F1 F2 mg/Kg 174 35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	105	70 - 130

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

Lab Sample ID: MB 880-37501/1-A

Matrix: Solid

Analysis Batch: 37440

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

Prep Batch: 37501

	MB MB						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0 U	50.0	mg/Kg		10/21/22 13:46	10/21/22 20:18	1
(GRO)-C6-C10							

Client: Ensolum Job ID: 890-3238-1
Project/Site: Elivis Injection Line SDG: 03D2057011

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

Lab Sample ID: MB 880-37501/1-A

Matrix: Solid

Analysis Batch: 37440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37501

	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		10/21/22 13:46	10/21/22 20:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/21/22 20:18	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			10/21/22 13:46	10/21/22 20:18	1
o-Terphenyl	108		70 - 130			10/21/22 13:46	10/21/22 20:18	1

Lab Sample ID: LCS 880-37501/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 37440 Prep Batch: 37501 LCS LCS Spike Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 1112 111 70 - 130 mg/Kg (GRO)-C6-C10 1000 1053 Diesel Range Organics (Over mg/Kg 105 70 - 130 C10-C28) LCS LCS Qualifier Limits Surrogate %Recovery 1-Chlorooctane 70 - 130 97

Lab Sample ID: LCSD 880-37501/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 37440 Prep Batch: 37501 Spike LCSD LCSD %Rec **RPD** Added Result Qualifier %Rec Limits RPD Limit Analyte Unit D Gasoline Range Organics 1000 950.0 95 70 - 130 16 20 mg/Kg (GRO)-C6-C10

1029

mg/Kg

103

70 - 130

2

20

70 - 130

1000

C10-C28)			
	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	116		70 - 130

120

Lab Sample ID: 890-3237-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 37440 Prep Batch: 37501 MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier %Rec Limits Unit

Gasoline Range Organics	<49.8 L	J	998	1078	mg/Kg	105	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	133		998	1006	mg/Kg	87	70 - 130	
C10-C28)								
	MS N	ns .						
Surrogate	%Recovery C	Qualifier L	imits.					
1-Chlorooctane	84	70	0 - 130					
o-Terphenyl	91	70	0 - 130					

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o-Terphenyl

Diesel Range Organics (Over

QC Sample Results

Job ID: 890-3238-1 Client: Ensolum Project/Site: Elivis Injection Line SDG: 03D2057011

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

Client Sample ID: Matrix Spike Duplicate

Lab Sample ID: 890-3237-A-1-C MSD **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 37440 Prep Batch: 37501

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.8	U	998	1136		mg/Kg		111	70 - 130	5	20
(GRO)-C6-C10											
Diesel Range Organics (Over	133		998	1003		mg/Kg		87	70 - 130	0	20
C10 C20)											

C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 83 o-Terphenyl 89 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37510/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Soluble

Analysis Batch: 37597

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/23/22 16:51	1

Lab Sample ID: LCS 880-37510/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37597

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 250	258.4	-	mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-37510/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37597

Spike LCSD LCSD RPD %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 255.9 102 90 - 110 mg/Kg

Lab Sample ID: 890-3236-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 37597

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	403	F1	252	626.5	F1	ma/Ka		89	90 110	

Lab Sample ID: 890-3236-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid Analysis Batch: 37597

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Analyte %Rec Limits RPD Limit Unit D 403 F1 252 629.1 Chloride 90 - 110 mg/Kg

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Prep Type: Soluble

QC Association Summary

Client: Ensolum

Project/Site: Elivis Injection Line

Job ID: 890-3238-1

SDG: 03D2057011

GC VOA

Prep Batch: 37517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-37517/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 37678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3238-1	PH04	Total/NA	Solid	5035	_
890-3238-2	PH04	Total/NA	Solid	5035	
890-3238-3	PH04	Total/NA	Solid	5035	
MB 880-37678/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37678/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37678/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20579-A-11-C MS	Matrix Spike	Total/NA	Solid	5035	
880-20579-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 37728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3238-1	PH04	Total/NA	Solid	8021B	37678
890-3238-2	PH04	Total/NA	Solid	8021B	37678
890-3238-3	PH04	Total/NA	Solid	8021B	37678
MB 880-37517/5-A	Method Blank	Total/NA	Solid	8021B	37517
MB 880-37678/5-A	Method Blank	Total/NA	Solid	8021B	37678
LCS 880-37678/1-A	Lab Control Sample	Total/NA	Solid	8021B	37678
LCSD 880-37678/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37678
880-20579-A-11-C MS	Matrix Spike	Total/NA	Solid	8021B	37678
880-20579-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	37678

Analysis Batch: 37869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3238-1	PH04	Total/NA	Solid	Total BTEX	
890-3238-2	PH04	Total/NA	Solid	Total BTEX	
890-3238-3	PH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 37440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3238-1	PH04	Total/NA	Solid	8015B NM	37501
890-3238-2	PH04	Total/NA	Solid	8015B NM	37501
890-3238-3	PH04	Total/NA	Solid	8015B NM	37501
MB 880-37501/1-A	Method Blank	Total/NA	Solid	8015B NM	37501
LCS 880-37501/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37501
LCSD 880-37501/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37501
890-3237-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	37501
890-3237-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37501

Prep Batch: 37501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3238-1	PH04	Total/NA	Solid	8015NM Prep	
890-3238-2	PH04	Total/NA	Solid	8015NM Prep	
890-3238-3	PH04	Total/NA	Solid	8015NM Prep	
MB 880-37501/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37501/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum Job ID: 890-3238-1 Project/Site: Elivis Injection Line SDG: 03D2057011

GC Semi VOA (Continued)

Prep Batch: 37501 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
LCSD 880-37501/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep
890-3237-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep
890-3237-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep

Analysis Batch: 37667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3238-1	PH04	Total/NA	Solid	8015 NM	
890-3238-2	PH04	Total/NA	Solid	8015 NM	
890-3238-3	PH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3238-1	PH04	Soluble	Solid	DI Leach	
890-3238-2	PH04	Soluble	Solid	DI Leach	
890-3238-3	PH04	Soluble	Solid	DI Leach	
MB 880-37510/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37510/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37510/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3236-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3236-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 37597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3238-1	PH04	Soluble	Solid	300.0	37510
890-3238-2	PH04	Soluble	Solid	300.0	37510
890-3238-3	PH04	Soluble	Solid	300.0	37510
MB 880-37510/1-A	Method Blank	Soluble	Solid	300.0	37510
LCS 880-37510/2-A	Lab Control Sample	Soluble	Solid	300.0	37510
LCSD 880-37510/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37510
890-3236-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	37510
890-3236-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	37510

Client Sample ID: PH04

Job ID: 890-3238-1 SDG: 03D2057011

Client: Ensolum Project/Site: Elivis Injection Line

Lab Sample ID: 890-3238-1

Date Collected: 10/19/22 10:00 **Matrix: Solid** Date Received: 10/20/22 09:38

	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	37678	10/24/22 13:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37728	10/26/22 04:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37869	10/26/22 09:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			37667	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 03:27	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	37597	10/23/22 17:59	CH	EET MID

Lab Sample ID: 890-3238-2 **Client Sample ID: PH04**

Date Collected: 10/19/22 10:15 **Matrix: Solid** Date Received: 10/20/22 09:38

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.99 g 5 mL 37678 10/24/22 13:20 MNR EET MID Total/NA 8021B 5 mL 10/26/22 05:03 **EET MID** Analysis 1 5 mL 37728 MNR Total/NA Total BTEX 37869 10/26/22 09:33 Analysis 1 SM **EET MID** Total/NA Analysis 8015 NM 37667 10/24/22 12:22 SM **EET MID** Total/NA Prep 8015NM Prep 37501 10.02 g 10 mL 10/21/22 13:46 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 37440 10/22/22 03:49 SM **EET MID** Soluble Leach DI Leach 5.05 g 50 mL 37510 10/21/22 14:10 KS **EET MID**

Client Sample ID: PH04 Lab Sample ID: 890-3238-3

50 mL

50 mL

37597

10/23/22 18:04

СН

Date Collected: 10/19/22 10:30 **Matrix: Solid** Date Received: 10/20/22 09:38

5

	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	37678	10/24/22 13:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37728	10/26/22 05:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37869	10/26/22 09:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			37667	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 04:11	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 18:09	CH	EET MID

Laboratory References:

Soluble

Analysis

300.0

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

Eurofins Carlsbad

EET MID

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-3238-1 Project/Site: Elivis Injection Line

SDG: 03D2057011

Laboratory: Eurofins Midland

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

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

Method Summary

Client: Ensolum Job ID: 890-3238-1 Project/Site: Elivis Injection Line SDG: 03D2057011

tocol	Laboratory
/846	EET MID
SOP	EET MID
10.40	EET MID

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: Elivis Injection Line

Job ID: 890-3238-1

SDG: 03D2057011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
890-3238-1	PH04	Solid	10/19/22 10:00	10/20/22 09:38	1
890-3238-2	PH04	Solid	10/19/22 10:15	10/20/22 09:38	2
890-3238-3	PH04	Solid	10/19/22 10:30	10/20/22 09:38	6

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Work Order No:

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

13

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

Environment Testing Xenco

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Programs Location Project Manager:	Kalei Jennings	ings			Bill to: (if different)	different)		Kalei Jennings	ngs				Work	Work Order Comments	-		
State of Project: Multipard: TX 79:014 State of Project: Email: Securing Securing Control of Project: Email: Securing Control of Project: Securing Control of	Company Name:	Ensolum, 1	TIC			Compan	v Name:		solum,	2			Program: US		☐ Brownfields ☐ R	RRC Super	[] punj
Participation Participatio	Address:	601 N Mar	ienfeld S	t Suite 400		Address)9	1 N Mar	enfeld St	Suite 400		State of Proj	ect:			[
Name: Envis Injection Line Turn Around Consolium composition AMALYSIS REQUEST Deciverables EDD AMALYSIS REQUEST Preservation Number: 00202057011 □ Routine □ Ro	City, State ZIP:	Midland, T	× 79704			City Stal	e ZIP:	Σ	dland, T	× 79701			Reporting: Le	vel II Level II	II 🗌 PST/UST 🗍 TF		 ∏∧ [a
All burden Turn Around Preservative Turn Blank Control Short Turn Blank Turn Blank Control Short Turn Blank Phone:				Ema	il: kjenninc	s@ens	olum.co	Ĕ				Deliverables:	EDO [Other:	\prod	
None: NO None: No	Project Name:	EIV	is Injection	on Line	T	rn Around						ANALYSIS	REQUEST		Prese	ervative Cod	es es
Fig. 8 F	Project Number:		03D2057	7011	✓ Routine			Pres. Code							None: NO	DI Wat	er: H ₂ O
First Name: Conner Shore Thy state the day received by a Specific British and Method(s) and Metals(s) to be analyzed Thy state the day received the state of the bib. frequency traces to the bib. frequency traces	Project Location:				Due Date										Cool: Cool		Me
Second S	Sampler's Name: PO #:		Sonner S	shore	TAT starts the lab, if n	the day recei eceived by 4	ved by	S				_			HCL: HC H ₂ S0 ₄ : H ₂	HNO ₃ : NaOH:	Z ES
Trection Factor:	SAMPLE RECE		mp Blank	1	-	M	²		lo:						H ₃ PO₄: HP	0	
Trection Factor:	Samples Received				meter ID:	7	200	-	One						NaHSO4: N	NABIS	
Trected Temperature:	Cooler Custody Sea		No	I/A Correcti	on Factor:	7.0	16		:W-						Na ₂ S ₂ O ₃ : N	NaSO ₃	
Trected Temperature:	Sample Custody Se		N _o		ature Reading:	3	20		13) c	,		890-3238	Chain of Custody		Zn Acetate+	e+NaOH: Zn	
Date ampled Sampled Conf	Total Containers:			Correcte	ed Temperature		۹		_	1208					NaOH+Asc	corbic Acid: SA	PC
19.22 1000 1' G 1 X X X X X 19.22 1015 2' G 1 X X X X X X X X X X X X X X X X X X	Sample Ide	ntification	Ma				2 0			я) хэта					Samp	ple Commer	S
19.22 1030 6' G 1 X X X X X X X X X X X X X X X X X X	PH(24	S	10.19.2		1,	9	-	-	×							
## 1922 1030 6' G 1 X X X X X X X X X	PH	24	S	10.19.2		2'	ပ	-		×							
SRCRA 13PPM Texas 11 Al Sb As Ba Be Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	PH	24	S	10.19.2		.9	ပ	-		×					Incir	ident Numbe	
BRCRA 13PPM Texas 11 Al Sb As Ba Be Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U				Yx 7	1												
BRCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U			9	· (M: ")													
SRCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U			10	1													
BRCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		/	1														
BRCRA 13PPM Texas 11 Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	100	1															
8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	4								+								
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U	Total 200.7 / 6		8 / 6020:		1 10	5 II			As Ba		- lg	r Co Cu Fe	Pb Mg Mn Mo		SiO ₂ Na Sr TI Sn	sn U V Zn	
	Circle Method(s) a	and Metal(s)	to be an	alyzed	TCLP /	SPLP 601	0: 8RC	RA SI	As B	Be C	1 Cr Co	Cu Pb Mn	Mo Ni Se Ag TI		1 1631 / 245.1 / 747	170 / 7471	
	of service. Eurofins Xer	nco will be liable	only for the	e cost of samp	les and shall not as	ssume any res	ponsibilit	y for any	osses or	xpenses in	curred by t	ne client if such lo	sses are due to circumst	o circumstances beyond the control	control		

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Relinquished by: (Signature)

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3238-1 SDG Number: 03D2057011

List Source: Eurofins Carlsbad

Login Number: 3238 List Number: 1 Creator: Clifton, Cloe

Question Answer Comment

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

The cooler or samples do not appear to have been compromised or tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate

HTs)

Sample containers have legible labels.

Containers are not broken or leaking.

Sample collection date/times are provided.

Appropriate sample containers are used.

Sample bottles are completely filled.

Sample Preservation Verified.

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

MS/MSDs

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

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10/26/2022

Login Sample Receipt Checklist

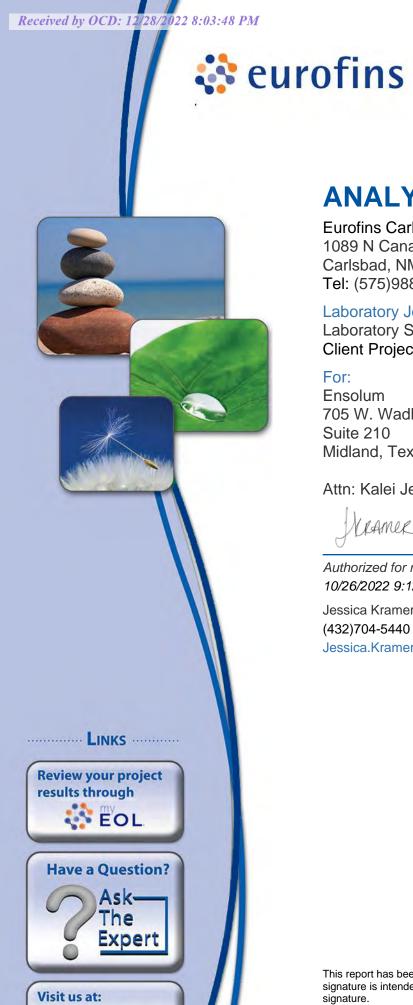
Client: Ensolum Job Number: 890-3238-1 SDG Number: 03D2057011

Login Number: 3238 **List Source: Eurofins Midland** List Number: 2 List Creation: 10/21/22 10:46 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").



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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3240-1

Laboratory Sample Delivery Group: 03D2057011

Client Project/Site: Elvis Injection Line

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/26/2022 9:12:52 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: Elvis Injection Line

Laboratory Job ID: 890-3240-1
SDG: 03D2057011

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Definitions/Glossary

Job ID: 890-3240-1 Client: Ensolum Project/Site: Elvis Injection Line

SDG: 03D2057011

Qualifiers

GC VOA

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

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier **Qualifier Description** MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. U Indicates the analyte was analyzed for but not detected.

Glossary

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

LOQ Limit of Quantitation (DoD/DOE) EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry) MDI Method Detection Limit Minimum Level (Dioxin)

Most Probable Number

MQL Method Quantitation Limit NC Not Calculated

MPN

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

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

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) RER

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: Elvis Injection Line

Job ID: 890-3240-1

SDG: 03D2057011

Job ID: 890-3240-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3240-1

Receipt

The samples were received on 10/20/2022 9:38 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 3.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH02 (890-3240-1), PH02 (890-3240-2) and PH02 (890-3240-3).

GC VOA

Method 8021B: The following sample was diluted due to the nature of the sample matrix: (880-20579-A-11-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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 880-37503 and analytical batch 880-37444 was outside the upper control 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 880-37511 and analytical batch 880-37598 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client: Ensolum Job ID: 890-3240-1 Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH02 Lab Sample ID: 890-3240-1

Date Collected: 10/19/22 09:05 Matrix: Solid Date Received: 10/20/22 09:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 05:44	
Toluene	<0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 05:44	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 05:44	•
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/24/22 13:20	10/26/22 05:44	
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 05:44	•
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/24/22 13:20	10/26/22 05:44	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	103		70 - 130			10/24/22 13:20	10/26/22 05:44	
1,4-Difluorobenzene (Surr)	100		70 - 130			10/24/22 13:20	10/26/22 05:44	:
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			10/26/22 09:33	
Method: SW846 8015 NM - Diese	ol Bango Organ	ice (DBO) (30)					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg		<u> </u>	10/24/22 09:48	
· -								
Method: SW846 8015B NM - Dies			(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	A so a la ses al	
							Analyzed	Dil Fac
5 5	<49.8	U	49.8	mg/Kg		10/21/22 13:50	10/21/22 20:52	Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over								
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/21/22 13:50	10/21/22 20:52	
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.8 <49.8	U U	49.8	mg/Kg		10/21/22 13:50 10/21/22 13:50	10/21/22 20:52	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.8 <49.8 <49.8	U U	49.8 49.8 49.8	mg/Kg		10/21/22 13:50 10/21/22 13:50 10/21/22 13:50	10/21/22 20:52 10/21/22 20:52 10/21/22 20:52	Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<49.8 <49.8 <49.8 %Recovery	U U	49.8 49.8 49.8 <i>Limits</i>	mg/Kg		10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared	10/21/22 20:52 10/21/22 20:52 10/21/22 20:52 Analyzed	Dil Fa
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.8 <49.8 <49.8 %Recovery 77 89	U U Qualifier	49.8 49.8 49.8 Limits 70 - 130 70 - 130	mg/Kg	_ =	10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared 10/21/22 13:50	10/21/22 20:52 10/21/22 20:52 10/21/22 20:52 Analyzed 10/21/22 20:52	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.8 <49.8 <49.8 **Recovery 77 89 s, lon Chromato	U U Qualifier	49.8 49.8 49.8 Limits 70 - 130 70 - 130	mg/Kg	<u></u>	10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared 10/21/22 13:50	10/21/22 20:52 10/21/22 20:52 10/21/22 20:52 Analyzed 10/21/22 20:52	Dil Fa

Client Sample ID: PH02 Lab Sample ID: 890-3240-2

Date Collected: 10/19/22 09:25 Date Received: 10/20/22 09:38

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/24/22 13:20	10/26/22 06:04	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/24/22 13:20	10/26/22 06:04	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/24/22 13:20	10/26/22 06:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/24/22 13:20	10/26/22 06:04	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/24/22 13:20	10/26/22 06:04	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/24/22 13:20	10/26/22 06:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/24/22 13:20	10/26/22 06:04	1

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Matrix: Solid

Job ID: 890-3240-1

Client: Ensolum Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH02 Lab Sample ID: 890-3240-2

Date Collected: 10/19/22 09:25 Matrix: Solid Date Received: 10/20/22 09:38

Sample Depth: 5

Method: SW846 8021B - V	/olatile Organic Compounds	(GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102	70 - 130	10/24/22 13:20	10/26/22 06:04	1

Method: TAI	SOP Total BTFX -	- Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	ma/Ka			10/26/22 09:33	1

Mothod: CIMOAC	8015 NM - Diesel	Dongo Organico	(DDO) (CC)
i weliiou. Swo46	ou io ivivi - Diesei	Range Organics	(DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	ma/Ka			10/24/22 09:48	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	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 21:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 21:53	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 21:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93	70 - 130	10/21/22 13:50	10/21/22 21:53	1
o-Terphenyl	104	70 - 130	10/21/22 13:50	10/21/22 21:53	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8760		50.0	mg/Kg			10/23/22 20:39	10

Client Sample ID: PH02 Lab Sample ID: 890-3240-3 **Matrix: Solid**

Date Collected: 10/19/22 09:40 Date Received: 10/20/22 09:38

Sample Depth: 12

1,4-Difluorobenzene (Surr)

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

Method. Syvoto 002 ID - Volat	ne Organic Comp)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 06:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 06:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 06:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/24/22 13:20	10/26/22 06:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 06:24	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/24/22 13:20	10/26/22 06:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			10/24/22 13:20	10/26/22 06:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	mg/Kg			10/26/22 09:33	1

70 - 130

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/24/22 09:48	1

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10/26/22 06:24

10/24/22 13:20

Client Sample Results

Client: Ensolum Job ID: 890-3240-1 Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH02 Date Collected: 10/19/22 09:40

Lab Sample ID: 890-3240-3

Matrix: Solid

Sample Depth: 12

Date Received: 10/20/22 09:38

Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		10/21/22 13:50	10/21/22 22:14	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		10/21/22 13:50	10/21/22 22:14	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/21/22 13:50	10/21/22 22:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			10/21/22 13:50	10/21/22 22:14	1
o-Terphenyl	96		70 - 130			10/21/22 13:50	10/21/22 22:14	1
- Method: MCAWW 300.0 - Anions	, Ion Chromato	ography - S	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120		4.96	mg/Kg			10/23/22 20:44	1

Surrogate Summary

Client: Ensolum

Project/Site: Elvis Injection Line

Job ID: 890-3240-1

SDG: 03D2057011

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Re
		BFB1	DFBZ1	ū
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-20579-A-11-C MS	Matrix Spike	89	99	
880-20579-A-11-D MSD	Matrix Spike Duplicate	97	105	
890-3240-1	PH02	103	100	
890-3240-2	PH02	101	102	
890-3240-3	PH02	99	97	
LCS 880-37678/1-A	Lab Control Sample	92	101	
LCSD 880-37678/2-A	Lab Control Sample Dup	94	96	
MB 880-37517/5-A	Method Blank	109	105	
MB 880-37678/5-A	Method Blank	108	106	
Surrogate Legend				
BFB = 4-Bromofluorobenze	ene (Surr)			
DFBZ = 1,4-Difluorobenzer	ne (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3240-1	PH02	77	89	
890-3240-2	PH02	93	104	
890-3240-2 MS	PH02	82	84	
890-3240-2 MSD	PH02	79	81	
890-3240-3	PH02	83	96	
LCS 880-37503/2-A	Lab Control Sample	90	100	
LCSD 880-37503/3-A	Lab Control Sample Dup	99	110	
MB 880-37503/1-A	Method Blank	118	133 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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2

4

6

8

10

10

13

Client: Ensolum Job ID: 890-3240-1 Project/Site: Elvis Injection Line SDG: 03D2057011

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37517/5-A

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37517

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Toluene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/21/22 14:22	10/25/22 11:26	
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/21/22 14:22	10/25/22 11:26	

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared
4-Bromofluorobenzene (Surr)	109		70 - 130	10/21/22 14:2
1,4-Difluorobenzene (Surr)	105		70 - 130	10/21/22 14:2

/22 14:22 10/25/22 11:26 10/25/22 11:26 /22 14:22

Analyzed

Lab Sample ID: MB 880-37678/5-A Client Sample ID: Method Blank **Matrix: Solid**

Prep Type: Total/NA Prep Batch: 37678

Analysis Batch: 37728 MR MR

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/24/22 13:20	10/25/22 23:00	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Pre	pared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/24/	/22 13:20	10/25/22 23:00	1
1,4-Difluorobenzene (Surr)	106		70 - 130	10/24/	/22 13:20	10/25/22 23:00	1

Lab Sample ID: LCS 880-37678/1-A

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 37678

Spike	LCS	LCS				%Rec	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
0.100	0.1004		mg/Kg		100	70 - 130	
0.100	0.1057		mg/Kg		106	70 - 130	
0.100	0.09437		mg/Kg		94	70 - 130	
0.200	0.1930		mg/Kg		96	70 - 130	
0.100	0.1024		mg/Kg		102	70 - 130	
	Added 0.100 0.100 0.100 0.100 0.200	Added Result 0.100 0.1004 0.100 0.1057 0.100 0.09437 0.200 0.1930	Added Result Qualifier 0.100 0.1004 0.100 0.1057 0.100 0.09437 0.200 0.1930	Added Result Qualifier Unit 0.100 0.1004 mg/Kg 0.100 0.1057 mg/Kg 0.100 0.09437 mg/Kg 0.200 0.1930 mg/Kg	Added Result Qualifier Unit D 0.100 0.1004 mg/Kg 0.100 0.1057 mg/Kg 0.100 0.09437 mg/Kg 0.200 0.1930 mg/Kg	Added Result Qualifier Unit D %Rec 0.100 0.1004 mg/Kg 100 0.100 0.1057 mg/Kg 106 0.100 0.09437 mg/Kg 94 0.200 0.1930 mg/Kg 96	Added Result Qualifier Unit D %Rec Limits 0.100 0.1004 mg/Kg 100 70 - 130 0.100 0.1057 mg/Kg 106 70 - 130 0.100 0.09437 mg/Kg 94 70 - 130 0.200 0.1930 mg/Kg 96 70 - 130

LCS LCS

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene (Surr)	92	70 - 130
1.4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-37678/2-A

Matrix: Solid

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 37678

Analysis Batch: 37728 Spike LCSD LCSD RPD %Rec Result Qualifier Analyte Added Unit %Rec Limits RPD Limit Benzene 0.100 0.09898 mg/Kg 99 70 - 130

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QC Sample Results

Client: Ensolum Job ID: 890-3240-1 Project/Site: Elvis Injection Line SDG: 03D2057011

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

Lab Sample ID: LCSD 880-37678/2-A

Matrix: Solid Analysis Batch: 37728 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 37678

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.1070		mg/Kg		107	70 - 130	1	35
Ethylbenzene	0.100	0.09688		mg/Kg		97	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1994		mg/Kg		100	70 - 130	3	35
o-Xylene	0.100	0.1064		mg/Kg		106	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-20579-A-11-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 37728** Prep Batch: 37678

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1 F2	0.0998	0.1091		mg/Kg	_	109	70 - 130	
Toluene	<0.00200	U F1 F2	0.0998	0.1041		mg/Kg		104	70 - 130	
Ethylbenzene	<0.00200	U F1 F2	0.0998	0.07417		mg/Kg		74	70 - 130	
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.200	0.1392		mg/Kg		70	70 - 130	
o-Xylene	<0.00200	U F1 F2	0.0998	0.08216		mg/Kg		82	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	89	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 880-20579-A-11-D MSD

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 37678

Spike MSD MSD RPD Sample Sample %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Benzene <0.00200 U F1 F2 0.101 0.002336 F1 F2 70 - 130 192 35 mg/Kg Toluene <0.00200 UF1F2 0.101 0.004596 F1 F2 mg/Kg 5 70 - 130 183 35 Ethylbenzene <0.00200 UF1F2 0.101 0.004565 F1 F2 mg/Kg 5 70 - 130 177 35 5 <0.00401 U F1 F2 0.201 0.01034 F1 F2 70 - 130 172 m-Xylene & p-Xylene mg/Kg 35 0.101 0.005707 F1 F2 o-Xylene <0.00200 U F1 F2 mq/Kq 70 - 130 174 35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Lab Sample ID: MB 880-37503/1-A

Matrix: Solid

Analysis Batch: 37444

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

Prep Batch: 37503

мв мв Result Qualifier RL Unit Prepared Gasoline Range Organics <50.0 U 50.0 mg/Kg 10/21/22 13:50 10/21/22 19:50 (GRO)-C6-C10

Client: Ensolum Job ID: 890-3240-1
Project/Site: Elvis Injection Line SDG: 03D2057011

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

Lab Sample ID: MB 880-37503/1-A

Matrix: Solid

Analysis Batch: 37444

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37503

	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		10/21/22 13:50	10/21/22 19:50	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 19:50	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			10/21/22 13:50	10/21/22 19:50	1
o-Terphenyl	133	S1+	70 - 130			10/21/22 13:50	10/21/22 19:50	1

Lab Sample ID: LCS 880-378 Matrix: Solid	503/2-A						Client	Sample	ID: Lab Control Sam Prep Type: Total/
Analysis Batch: 37444									Prep Batch: 375
			Spike	LCS	LCS				%Rec
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics			1000	858.1		mg/Kg		86	70 - 130
(GRO)-C6-C10									
Diesel Range Organics (Over			1000	774.2		mg/Kg		77	70 - 130
C10-C28)									
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	90		70 - 130						
o-Terphenyl	100		70 - 130						

Lab Sample ID: LCSD 880-37503/3-A				Cilei	nt Sam	ו :עו אוף:	Lab Contro	ı Sampı	e טעp
Matrix: Solid							Prep 1	ype: Tot	tal/NA
Analysis Batch: 37444							Prep	Batch:	37503
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1041		mg/Kg		104	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	1000	902.2		mg/Kg		90	70 - 130	15	20

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	110		70 - 130
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LCSD LCSD

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Lab Sample ID: 890-3240-2 MS Matrix: Solid Analysis Batch: 37444									Client Sample Prep Type: Prep Bato	Total/NA
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1086		mg/Kg		109	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	781.6		mg/Kg		76	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	82		70 - 130							

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70 - 130

o-Terphenyl

Job ID: 890-3240-1

Client: Ensolum SDG: 03D2057011 Project/Site: Elvis Injection Line

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

Lab Sample ID: 890-3240-2 MSD									Client Sa	imple ID:	PH02	
Matrix: Solid									Prep	Type: Tot	tal/NA	
Analysis Batch: 37444									Pre	p Batch:	37503	i
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	ı

	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	<49.9	U	998	1014		mg/Kg		102	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	762.1		mg/Kg		74	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	81		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37511/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37598

	МВ	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/23/22 19:22	1

Lab Sample ID: LCS 880-37511/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble Analysis Batch: 37598**

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	259.6		mg/Kg		104	90 - 110	

Lab Sample ID: LCSD 880-37511/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37598

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	259.0		mg/Kg	_	104	90 - 110	0	20	

Lab Sample ID: 890-3240-3 MS **Client Sample ID: PH02** Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 37598

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1120		248	1334	4	ma/Ka		87	90 110	

Lab Sample ID: 890-3240-3 MSD Client Sample ID: PH02 **Prep Type: Soluble**

Matrix: Solid Analysis Batch: 37598

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1120		248	1329	4	mg/Kg		85	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Elvis Injection Line

Job ID: 890-3240-1 SDG: 03D2057011

GC VOA

Prep Batch: 37517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-37517/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 37678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3240-1	PH02	Total/NA	Solid	5035	
890-3240-2	PH02	Total/NA	Solid	5035	
890-3240-3	PH02	Total/NA	Solid	5035	
MB 880-37678/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37678/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37678/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20579-A-11-C MS	Matrix Spike	Total/NA	Solid	5035	
880-20579-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 37728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3240-1	PH02	Total/NA	Solid	8021B	37678
890-3240-2	PH02	Total/NA	Solid	8021B	37678
890-3240-3	PH02	Total/NA	Solid	8021B	37678
MB 880-37517/5-A	Method Blank	Total/NA	Solid	8021B	37517
MB 880-37678/5-A	Method Blank	Total/NA	Solid	8021B	37678
LCS 880-37678/1-A	Lab Control Sample	Total/NA	Solid	8021B	37678
LCSD 880-37678/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37678
880-20579-A-11-C MS	Matrix Spike	Total/NA	Solid	8021B	37678
880-20579-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	37678

Analysis Batch: 37870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3240-1	PH02	Total/NA	Solid	Total BTEX	
890-3240-2	PH02	Total/NA	Solid	Total BTEX	
890-3240-3	PH02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 37444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3240-1	PH02	Total/NA	Solid	8015B NM	37503
890-3240-2	PH02	Total/NA	Solid	8015B NM	37503
890-3240-3	PH02	Total/NA	Solid	8015B NM	37503
MB 880-37503/1-A	Method Blank	Total/NA	Solid	8015B NM	37503
LCS 880-37503/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37503
LCSD 880-37503/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37503
890-3240-2 MS	PH02	Total/NA	Solid	8015B NM	37503
890-3240-2 MSD	PH02	Total/NA	Solid	8015B NM	37503

Prep Batch: 37503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3240-1	PH02	Total/NA	Solid	8015NM Prep	
890-3240-2	PH02	Total/NA	Solid	8015NM Prep	
890-3240-3	PH02	Total/NA	Solid	8015NM Prep	
MB 880-37503/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37503/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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Released to Imaging: 1/24/2023 2:09:07 PM

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QC Association Summary

Client: Ensolum
Project/Site: Elvis Injection Line

Job ID: 890-3240-1
SDG: 03D2057011

GC Semi VOA (Continued)

Prep Batch: 37503 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batc	h
LCSD 880-37503/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	_
890-3240-2 MS	PH02	Total/NA	Solid	8015NM Prep	
890-3240-2 MSD	PH02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3240-1	PH02	Total/NA	Solid	8015 NM	
890-3240-2	PH02	Total/NA	Solid	8015 NM	
890-3240-3	PH02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3240-1	PH02	Soluble	Solid	DI Leach	_
890-3240-2	PH02	Soluble	Solid	DI Leach	
890-3240-3	PH02	Soluble	Solid	DI Leach	
MB 880-37511/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37511/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37511/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3240-3 MS	PH02	Soluble	Solid	DI Leach	
890-3240-3 MSD	PH02	Soluble	Solid	DI Leach	

Analysis Batch: 37598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3240-1	PH02	Soluble	Solid	300.0	37511
890-3240-2	PH02	Soluble	Solid	300.0	37511
890-3240-3	PH02	Soluble	Solid	300.0	37511
MB 880-37511/1-A	Method Blank	Soluble	Solid	300.0	37511
LCS 880-37511/2-A	Lab Control Sample	Soluble	Solid	300.0	37511
LCSD 880-37511/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37511
890-3240-3 MS	PH02	Soluble	Solid	300.0	37511
890-3240-3 MSD	PH02	Soluble	Solid	300.0	37511

Client: Ensolum

Job ID: 890-3240-1 Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH02 Lab Sample ID: 890-3240-1

Date Collected: 10/19/22 09:05 **Matrix: Solid** Date Received: 10/20/22 09:38

	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	37678	10/24/22 13:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37728	10/26/22 05:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37870	10/26/22 09:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			37627	10/24/22 09:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37503	10/21/22 13:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37444	10/21/22 20:52	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	37511	10/21/22 14:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37598	10/23/22 20:35	CH	EET MID

Lab Sample ID: 890-3240-2 **Client Sample ID: PH02** Date Collected: 10/19/22 09:25 **Matrix: Solid**

Date Received: 10/20/22 09:38

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 4.97 g Total/NA 5 mL 37678 10/24/22 13:20 MNR EET MID Total/NA 8021B 5 mL 10/26/22 06:04 **EET MID** Analysis 1 5 mL 37728 MNR Total/NA Total BTEX 37870 10/26/22 09:33 Analysis 1 SM **EET MID** Total/NA Analysis 8015 NM 37627 10/24/22 09:48 SM **EET MID** Total/NA Prep 8015NM Prep 37503 10.03 g 10 mL 10/21/22 13:50 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 37444 10/21/22 21:53 SM **EET MID** Soluble KS Leach DI Leach 5.00 g 50 mL 37511 10/21/22 14:12 **EET MID**

Lab Sample ID: 890-3240-3 **Client Sample ID: PH02** Date Collected: 10/19/22 09:40

50 mL

50 mL

37598

10/23/22 20:39

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EET MID

Matrix: Solid

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Date Received: 10/20/22 09:38

Analysis

300.0

Soluble

	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	37678	10/24/22 13:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37728	10/26/22 06:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37870	10/26/22 09:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			37627	10/24/22 09:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37503	10/21/22 13:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37444	10/21/22 22:14	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37511	10/21/22 14:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37598	10/23/22 20:44	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Elvis Injection Line

Job ID: 890-3240-1
SDG: 03D2057011

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-22-24	06-30-23
The following analytes the agency does not o		ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
00.0				

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EET MID

ASTM

Method Summary

Client: Ensolum
Project/Site: Elvis Injection Line

Job ID: 890-3240-1
SDG: 03D2057011

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

Protocol References:

DI Leach

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Deionized Water Leaching Procedure

Laboratory References:

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

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4.0

Sample Summary

Client: Ensolum

Project/Site: Elvis Injection Line

Job ID: 890-3240-1

SDG: 03D2057011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	De
890-3240-1	PH02	Solid	10/19/22 09:05	10/20/22 09:38	1
890-3240-2	PH02	Solid	10/19/22 09:25	10/20/22 09:38	5
890-3240-3	PH02	Solid	10/19/22 09:40	10/20/22 09:38	12

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

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service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control Eurofins Xenco. A minimum charge of \$65.00 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.

otice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions

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

sed Date: 08/25/2020 Rev. 2020.

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Chain of Custody

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

Environment Testing

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Xenco

Work Order No:

Etroplum, LLC	Project Manager:	Kalei Jennings			Bill to: (if different)	ent)	Kalei	Kalei Jennings	S			Work Order	Work Order Comments
Namiented St Suite 400 Address: 601 N Mariented St Suite 400 State of Project:	Company Name:	Ensolum, LLC			Company Na	me:	Enso	um, LL			Program	UST/PST PRP Brow	wnfields 🗌 RRC 🔲 Superfun
Elvis Injection Line	Address:	601 N Marienfeld St	Suite 400		Address:		601	Marier	feld St Su	e 400	State of F	roject:	
Elvis Injection Line	City, State ZIP:	Midland, TX 79701			City, State Z	ò	Midla	Dd TX	1026		Reporting	: Level II Level III PS	ST/UST TRRP Level IV
Elvis Injection Line	Phone:			Email:	kjennings@	ensolı	m.com				Deliverab	EDD [
Conner Shore Due Date First the day received by 3 pm First the lab Taris that the l	Project Name:	Elvis Injection	n Line	Turn	Around					A	NALYSIS REQUEST		Preservative Codes
Conner Shore	Project Number:	03D2057C)11	✓ Routine	□ Rush	Co	ai 40						None: NO DI Water: H ₂ O
Tart starts the day received by Tart starts Tart s	Project Location:			Due Date:									
Temp Blank: (Yes No Wet Ice: (**) Temp Blank: (Yes No Wet Ice: (**) Temp Blank: (Yes No Wet Ice: (**) Temperature Reading: (**) Temp	Sampler's Name:	Conner Sh	lore	TAT starts the	e day received I	_							HCL: HC HNO3: HN H,SQ; H, NAOH: NA
Temp Blank: Yes No Wel Ice: Ces No No No No No No No No	PO #:			and and an	don't fa pake	_			_	_			,
Yes No Thermometer ID:	SAMPLE RECE		Zes Z	-	- 1		-		_				H3PO4: HP
Yes No WA Correction Factor:	Samples Received	(Yes)	Thermom	eter ID:	Inm-00	2							NaHSO4: NABIS
Yes No M/A Temperature Reading: 3 &	Cooler Custody Sea	Yes No /	Correction	Factor:	C.C-	_							Na ₂ S ₂ O ₃ : NaSO ₃
Corrected Temperature: 3 \ \times Composition Matrix Date Time Comp Grabb # of Comp C	Sample Custody Se	Yes No	4 Temperat	ure Reading:	3.8		3) S			- w	990-3240 Chain of Custody		Zn Acetate+NaOH: Zn
Matrix Date Time Depth Grab! # of OR Comp Cont Cont Comp Cont	Total Containers:		Corrected	Temperature:	3.5		IDE	(910	1208				NaOH+Ascorbic Acid: SAPC
S 10.19.22 905 1' G 1 X X X X X X X X X X X X X X X X X X	Sample Ide					# 0°		08) H T T) хэта				Sample Comments
S 10.19.22 925 5' G 1 X X X X X X X X X X X X X X X X X X	Hd		10.19.22	905		-	×	×	×				
S 10.19.22 940 12' G 1 X X X X X X X X X X X X X X X X X X	HA		10.19.22	925			×	×	×				
12/11	F		10.19.22	940		_	×	×	×				Incident Number
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Relinquished by: (Signature)

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3240-1

 SDG Number: 03D2057011

Login Number: 3240 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3240-1

SDG Number: 03D2057011

List Source: Eurofins Midland

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 3240

List Source: Eurotins Midland
List Creation: 10/21/22 10:46 AM

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	
ls the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3241-1

Laboratory Sample Delivery Group: 03D2057011

Client Project/Site: Elvis Injection Line

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/26/2022 9:12:52 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: Elvis Injection Line
Laboratory Job ID: 890-3241-1
SDG: 03D2057011

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Definitions/Glossary

Job ID: 890-3241-1 Client: Ensolum Project/Site: Elvis Injection Line

SDG: 03D2057011

Qualifiers

GC VOA Qualifier

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

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

applicable.

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 Contains No Free Liquid CNF

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac **Dilution Factor**

DΙ Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit **PQL**

PRFS 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: Elvis Injection Line

Job ID: 890-3241-1 SDG: 03D2057011

Job ID: 890-3241-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3241-1

Receipt

The samples were received on 10/20/2022 9:38 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 3.6° C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-3241-1), PH01 (890-3241-2) and PH01 (890-3241-3).

GC VOA

Method 8021B: The following sample was diluted due to the nature of the sample matrix: (880-20579-A-11-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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 880-37503 and analytical batch 880-37444 was outside the upper control 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 880-37511 and analytical batch 880-37598 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Matrix: Solid

Lab Sample ID: 890-3241-1

Job ID: 890-3241-1

Client: Ensolum Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH01

Date Collected: 10/19/22 09:00 Date Received: 10/20/22 09:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 06:45	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 06:45	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 06:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/24/22 13:20	10/26/22 06:45	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 06:45	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/24/22 13:20	10/26/22 06:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			10/24/22 13:20	10/26/22 06:45	1
1,4-Difluorobenzene (Surr)	99		70 - 130			10/24/22 13:20	10/26/22 06:45	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398	mg/Kg			10/26/22 09:33	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Method: SW846 8015 NM - Diese Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	•	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 10/24/22 09:48	Dil Fac
Analyte Total TPH	Result <49.9	Qualifier U	49.9		<u>D</u>	Prepared		
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.9 sel Range Orga	Qualifier U	49.9		<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.9 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 49.9	mg/Kg			10/24/22 09:48	1
Analyte	Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	RL 49.9 (GC)	mg/Kg		Prepared	10/24/22 09:48 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 sel Range Orga Result <49.9	Qualifier U nics (DRO) Qualifier U	RL 49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 10/21/22 13:50	10/24/22 09:48 Analyzed 10/21/22 22:35	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 sel Range Orga Result <49.9 <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:50 10/21/22 13:50	10/24/22 09:48 Analyzed 10/21/22 22:35 10/21/22 22:35	1 Dil Fac 1 1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:50 10/21/22 13:50 10/21/22 13:50	Analyzed 10/21/22 22:35 10/21/22 22:35	1 Dil Fac 1 1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared	Analyzed 10/21/22 22:35 10/21/22 22:35 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared 10/21/22 13:50	Analyzed 10/21/22 22:35 10/21/22 22:35 10/21/22 22:35 Analyzed 10/21/22 22:35	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared 10/21/22 13:50	Analyzed 10/21/22 22:35 10/21/22 22:35 10/21/22 22:35 Analyzed 10/21/22 22:35	1 Dil Fac 1 1 1 1 Dil Fac 1

Client Sample ID: PH01 Lab Sample ID: 890-3241-2

Date Collected: 10/19/22 09:15 Date Received: 10/20/22 09:38

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 07:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 07:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 07:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/24/22 13:20	10/26/22 07:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/26/22 07:05	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/24/22 13:20	10/26/22 07:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130			10/24/22 13:20	10/26/22 07:05	1

Eurofins Carlsbad

Released to Imaging: 1/24/2023 2:09:07 PM

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3241-1 SDG: 03D2057011 Project/Site: Elvis Injection Line

Client Sample ID: PH01 Lab Sample ID: 890-3241-2

Date Collected: 10/19/22 09:15 **Matrix: Solid** Date Received: 10/20/22 09:38

Sample Depth: 5

Method: SW846 8021B .	Volatile Organic Compounds	(GC) (Continued)
MICHIOU. STYUTU UUZ ID	Volatile Organic Compounds	(OO) (Oolillillaea)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102	70 - 130	10/24/22 13:20	10/26/22 07:05	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399 U	0.00399	ma/Ka			10/26/22 09:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 09:48	1

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

	5 "	• ""			_			B:: E
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 22:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 22:55	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 22:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88	70 - 130	10/21/22 13:50	10/21/22 22:55	1
o-Terphenyl	101	70 - 130	10/21/22 13:50	10/21/22 22:55	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	6410		50.2	mg/Kg			10/23/22 21:04	10	

Lab Sample ID: 890-3241-3 **Client Sample ID: PH01**

Date Collected: 10/19/22 09:30 Date Received: 10/20/22 09:38

Sample Depth: 13

Method: SW846	S 2021R - Volatile	Organic (Compounds	(CC)

Welliou. Syvo40 002 ID - Volat	ne Organic Comp)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 07:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 07:26	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 07:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/24/22 13:20	10/26/22 07:26	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/24/22 13:20	10/26/22 07:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/24/22 13:20	10/26/22 07:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			10/24/22 13:20	10/26/22 07:26	1
1 4-Difluorobenzene (Surr)	97		70 130			10/24/22 13:20	10/26/22 07:26	1

Mothod: TAI	SOP Total RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398	ma/Ka			10/26/22 09:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 09:48	1

Eurofins Carlsbad

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3241-1
Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH01

Lab Sample ID: 890-3241-3

Matrix: Solid

Date Collected: 10/19/22 09:30 Date Received: 10/20/22 09:38

Date Received: 10/20/22 09:38

Sample Depth: 13

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 23:16	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 23:16	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/21/22 23:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130			10/21/22 13:50	10/21/22 23:16	1
o-Terphenyl	96		70 - 130			10/21/22 13:50	10/21/22 23:16	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	787	-	5.04	mg/Kg		-	10/23/22 21:18	

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Surrogate Summary

Job ID: 890-3241-1 Client: Ensolum Project/Site: Elvis Injection Line SDG: 03D2057011

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-20579-A-11-C MS	Matrix Spike	89	99	
880-20579-A-11-D MSD	Matrix Spike Duplicate	97	105	
890-3241-1	PH01	115	99	
890-3241-2	PH01	91	102	
890-3241-3	PH01	108	97	
LCS 880-37678/1-A	Lab Control Sample	92	101	
LCSD 880-37678/2-A	Lab Control Sample Dup	94	96	
MB 880-37517/5-A	Method Blank	109	105	
MB 880-37678/5-A	Method Blank	108	106	
Surrogate Legend				
BFB = 4-Bromofluoroben	zene (Surr)			-
DFBZ = 1,4-Difluorobenz	ene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3240-A-2-C MS	Matrix Spike	82	84	
890-3240-A-2-D MSD	Matrix Spike Duplicate	79	81	
890-3241-1	PH01	82	95	
890-3241-2	PH01	88	101	
890-3241-3	PH01	84	96	
LCS 880-37503/2-A	Lab Control Sample	90	100	
LCSD 880-37503/3-A	Lab Control Sample Dup	99	110	
MB 880-37503/1-A	Method Blank	118	133 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3241-1 SDG: 03D2057011 Project/Site: Elvis Injection Line

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37517/5-A

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37517

1

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Toluene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/21/22 14:22	10/25/22 11:26	
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/21/22 14:22	10/25/22 11:26	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/21/22 14:22	10/25/22 11:26	

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	10/21/22 14:2	2 10/25/22 11:26	1
1,4-Difluorobenzene (Surr)	105		70 - 130	10/21/22 14:2	2 10/25/22 11:26	1

Lab Sample ID: MB 880-37678/5-A

Matrix: Solid

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

atch: 37678

matrix. Cona			i iop iyp
Analysis Batch: 37728			Prep Ba
	MB MB		
	D 11 0 110	D 1 11 11	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 13:20	10/25/22 23:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/24/22 13:20	10/25/22 23:00	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/24/22 13:20	10/25/22 23:00	1
1,4-Difluorobenzene (Surr)	106		70 - 130	10/24/22 13:20	10/25/22 23:00	1

Lab Sample ID: LCS 880-37678/1-A

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 37678

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1004		mg/Kg		100	70 - 130	
Toluene	0.100	0.1057		mg/Kg		106	70 - 130	
Ethylbenzene	0.100	0.09437		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	0.200	0.1930		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.1024		mg/Kg		102	70 - 130	

LCS LCS

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	92	70 - 130
1.4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-37678/2-A

Matrix: Solid

Analysis Batch: 37728

Client	Sample	ID: Lat	Control	Sample Dup

Prep Type: Total/NA

Prep Batch: 37678

	эріке	LCSD LCS				%Rec		KPD
Analyte	Added	Result Qua	alifier Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09898	mg/Kg		99	70 - 130	1	35

QC Sample Results

Client: Ensolum Job ID: 890-3241-1 SDG: 03D2057011 Project/Site: Elvis Injection Line

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

Lab Sample ID: LCSD 880-37678/2-A

Matrix: Solid Analysis Batch: 37728 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 37678

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.1070		mg/Kg		107	70 - 130	1	35
Ethylbenzene	0.100	0.09688		mg/Kg		97	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1994		mg/Kg		100	70 - 130	3	35
o-Xylene	0.100	0.1064		mg/Kg		106	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-20579-A-11-C MS

Matrix: Solid

Analysis Batch: 37728

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

Prep Batch: 37678

Sample	Sample	Spike	MS	MS				%Rec
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
<0.00200	U F1 F2	0.0998	0.1091		mg/Kg		109	70 - 130
<0.00200	U F1 F2	0.0998	0.1041		mg/Kg		104	70 - 130
<0.00200	U F1 F2	0.0998	0.07417		mg/Kg		74	70 - 130
<0.00401	U F1 F2	0.200	0.1392		mg/Kg		70	70 - 130
<0.00200	U F1 F2	0.0998	0.08216		mg/Kg		82	70 - 130
	Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00401	Sample Sample Result Qualifier <0.00200	Result Qualifier Added <0.00200	Result Qualifier Added Result <0.00200	Result Qualifier Added Result Qualifier <0.00200	Result Qualifier Added Result Qualifier Unit <0.00200	Result Qualifier Added Result Qualifier Unit D <0.00200	Result Qualifier Added Result Qualifier Unit D %Rec <0.00200

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	89	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 880-20579-A-11-D MSD

Matrix: Solid

Analysis Batch: 37728

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 37678

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1 F2	0.101	0.002336	F1 F2	mg/Kg		2	70 - 130	192	35
Toluene	<0.00200	U F1 F2	0.101	0.004596	F1 F2	mg/Kg		5	70 - 130	183	35
Ethylbenzene	<0.00200	U F1 F2	0.101	0.004565	F1 F2	mg/Kg		5	70 - 130	177	35
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.201	0.01034	F1 F2	mg/Kg		5	70 - 130	172	35
o-Xylene	<0.00200	U F1 F2	0.101	0.005707	F1 F2	mg/Kg		6	70 - 130	174	35

MSD MSD

Surroyate	76Recovery	Qualifier	LIIIIII
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Lab Sample ID: MB 880-37503/1-A

Matrix: Solid

Analysis Batch: 37444

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

Prep Batch: 37503

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 19:50	1
(GRO)-C6-C10								

o-Terphenyl

Client: Ensolum Job ID: 890-3241-1 Project/Site: Elvis Injection Line

SDG: 03D2057011

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

Lab Sample ID: MB 880-37503/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 37444 Prep Batch: 37503

	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 19:50	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 19:50	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			10/21/22 13:50	10/21/22 19:50	1
o-Terphenyl	133	S1+	70 - 130			10/21/22 13:50	10/21/22 19:50	1

Lab Sample ID: LCS 880-37503/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 37444** Prep Batch: 37503 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 858.1 86 70 - 130 mg/Kg (GRO)-C6-C10 1000 774.2 Diesel Range Organics (Over mg/Kg 77 70 - 130 C10-C28) LCS LCS Qualifier Limits Surrogate %Recovery 1-Chlorooctane 70 - 130 90

Lab Sample ID: LCSD 880-37503/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 37444 Prep Batch: 37503

70 - 130

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1041		mg/Kg		104	70 - 130	19	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	902.2		mg/Kg		90	70 - 130	15	20
C10-C28)									

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	110		70 - 130

100

Lab Sample ID: 890-3240-A-2-C M	S							Client	Sample ID	: Matrix Spike
Matrix: Solid									Prep 1	Type: Total/NA
Analysis Batch: 37444									Prep	Batch: 37503
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	998	1086		mg/Kg		109	70 - 130	

Analyte	Resuit	Qualifier	Added	Resuit	Qualifier	UIIIL	U	70Rec	Lillins	
Gasoline Range Organics	<49.9	U	998	1086		mg/Kg		109	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	998	781.6		mg/Kg		76	70 - 130	
C10-C28)										
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	82		70 - 130							
o-Terphenyl	84		70 - 130							
—										

Job ID: 890-3241-1

Client: Ensolum Project/Site: Elvis Injection Line SDG: 03D2057011

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

Client Sample ID: Matrix Spike Duplicate

Lab Sample ID: 890-3240-A-2-D MSD **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 37444 Prep Batch: 37503

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	998	1014		mg/Kg		102	70 - 130	7	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	998	762.1		mg/Kg		74	70 - 130	3	20

C10-C28)

MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 1-Chlorooctane 79 o-Terphenyl 81 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37511/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 37598

MB MB Result Qualifier RL Unit Analyte Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 10/23/22 19:22

Lab Sample ID: LCS 880-37511/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37598

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 259.6 90 - 110 mg/Kg 104

Lab Sample ID: LCSD 880-37511/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 37598

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	250.0		ma/Ka		104	90 110		20	

Lab Sample ID: 890-3240-A-3-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 37598

Sample Sample Spike MS MS %Rec Qualifier Added Qualifier Analyte Result Result %Rec Limits Unit Chloride 248 1334 87 90 - 110 1120 mg/Kg

Lab Sample ID: 890-3240-A-3-D MSD

Matrix: Solid

Analysis Batch: 37598

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1120		248	1329	4	mg/Kg		85	90 - 110	0	20

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Prep Type: Soluble

Client Sample ID: Matrix Spike Duplicate

QC Association Summary

Client: Ensolum

Project/Site: Elvis Injection Line

Job ID: 890-3241-1

SDG: 03D2057011

GC VOA

Prep Batch: 37517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-37517/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 37678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3241-1	PH01	Total/NA	Solid	5035	
890-3241-2	PH01	Total/NA	Solid	5035	
890-3241-3	PH01	Total/NA	Solid	5035	
MB 880-37678/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37678/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37678/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20579-A-11-C MS	Matrix Spike	Total/NA	Solid	5035	
880-20579-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 37728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3241-1	PH01	Total/NA	Solid	8021B	37678
890-3241-2	PH01	Total/NA	Solid	8021B	37678
890-3241-3	PH01	Total/NA	Solid	8021B	37678
MB 880-37517/5-A	Method Blank	Total/NA	Solid	8021B	37517
MB 880-37678/5-A	Method Blank	Total/NA	Solid	8021B	37678
LCS 880-37678/1-A	Lab Control Sample	Total/NA	Solid	8021B	37678
LCSD 880-37678/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37678
880-20579-A-11-C MS	Matrix Spike	Total/NA	Solid	8021B	37678
880-20579-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	37678

Analysis Batch: 37871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3241-1	PH01	Total/NA	Solid	Total BTEX	
890-3241-2	PH01	Total/NA	Solid	Total BTEX	
890-3241-3	PH01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 37444

Г					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3241-1	PH01	Total/NA	Solid	8015B NM	37503
890-3241-2	PH01	Total/NA	Solid	8015B NM	37503
890-3241-3	PH01	Total/NA	Solid	8015B NM	37503
MB 880-37503/1-A	Method Blank	Total/NA	Solid	8015B NM	37503
LCS 880-37503/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37503
LCSD 880-37503/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37503
890-3240-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	37503
890-3240-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37503

Prep Batch: 37503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3241-1	PH01	Total/NA	Solid	8015NM Prep	
890-3241-2	PH01	Total/NA	Solid	8015NM Prep	
890-3241-3	PH01	Total/NA	Solid	8015NM Prep	
MB 880-37503/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37503/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum Job ID: 890-3241-1 Project/Site: Elvis Injection Line SDG: 03D2057011

GC Semi VOA (Continued)

Prep Batch: 37503 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-37503/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3240-A-2-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3240-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3241-1	PH01	Total/NA	Solid	8015 NM	
890-3241-2	PH01	Total/NA	Solid	8015 NM	
890-3241-3	PH01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3241-1	PH01	Soluble	Solid	DI Leach	_
890-3241-2	PH01	Soluble	Solid	DI Leach	
890-3241-3	PH01	Soluble	Solid	DI Leach	
MB 880-37511/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37511/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37511/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3240-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3240-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 37598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3241-1	PH01	Soluble	Solid	300.0	37511
890-3241-2	PH01	Soluble	Solid	300.0	37511
890-3241-3	PH01	Soluble	Solid	300.0	37511
MB 880-37511/1-A	Method Blank	Soluble	Solid	300.0	37511
LCS 880-37511/2-A	Lab Control Sample	Soluble	Solid	300.0	37511
LCSD 880-37511/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37511
890-3240-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	37511
890-3240-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	37511

Client: Ensolum Job ID: 890-3241-1

Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH01 Lab Sample ID: 890-3241-1

Date Collected: 10/19/22 09:00 **Matrix: Solid** Date Received: 10/20/22 09:38

	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	37678	10/24/22 13:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37728	10/26/22 06:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37871	10/26/22 09:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			37628	10/24/22 09:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37503	10/21/22 13:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37444	10/21/22 22:35	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37511	10/21/22 14:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37598	10/23/22 20:59	CH	EET MID

Lab Sample ID: 890-3241-2 **Client Sample ID: PH01**

Date Collected: 10/19/22 09:15 Date Received: 10/20/22 09:38

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.01 g 5 mL 37678 10/24/22 13:20 MNR EET MID Total/NA 8021B 5 mL 10/26/22 07:05 **EET MID** Analysis 1 5 mL 37728 MNR Total/NA Total BTEX 37871 10/26/22 09:33 Analysis 1 SM **EET MID** Total/NA Analysis 8015 NM 37628 10/24/22 09:48 SM **EET MID** Total/NA Prep 8015NM Prep 37503 10.02 g 10 mL 10/21/22 13:50 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 37444 10/21/22 22:55 SM **EET MID** Soluble KS Leach DI Leach 4.98 g 50 mL 37511 10/21/22 14:12 **EET MID** Soluble Analysis 300.0 10 50 mL 50 mL 37598 10/23/22 21:04 СН **EET MID**

Lab Sample ID: 890-3241-3 **Client Sample ID: PH01** Date Collected: 10/19/22 09:30

Date Received: 10/20/22 09:38

	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	37678	10/24/22 13:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37728	10/26/22 07:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37871	10/26/22 09:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			37628	10/24/22 09:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37503	10/21/22 13:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37444	10/21/22 23:16	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	37511	10/21/22 14:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37598	10/23/22 21:18	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Matrix: Solid

Matrix: Solid

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Elvis Injection Line

Job ID: 890-3241-1
SDG: 03D2057011

Laboratory: Eurofins Midland

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

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

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Method Summary

Job ID: 890-3241-1 Client: Ensolum Project/Site: Elvis Injection Line

SDG: 03D2057011

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Carlsbad

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Sample Summary

Client: Ensolum

Project/Site: Elvis Injection Line

Job ID: 890-3241-1

SDG: 03D2057011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3241-1	PH01	Solid	10/19/22 09:00	10/20/22 09:38	1
890-3241-2	PH01	Solid	10/19/22 09:15	10/20/22 09:38	5
890-3241-3	PH01	Solid	10/19/22 09:30	10/20/22 09:38	13

Page

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Work Order No:

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

928

06/06/01

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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 services. A minimum charge of \$56.00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated Votice; Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions

Chain of Custody

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

Environment Testing

... eurofins

Xenco

Project Manager:	Kalei Jennings			Bill to: (if different)	ifferent		Kalei Jennings	nnings			Work	Work Order Comments	
Company Name:	Ensolum, LLC			Company Nar	Name		Ensolum, LLC	1, LLC			Program: UST/PST PRP Brownfields RRC	□ Brownfields □ RRC □ Superfund □	
Address:	601 N Marienfeld St Suite 400	Suite 400		Address:			101 N N	larienfe	601 N Marienfeld St Suite 400	400	State of Project:	[
City, State ZIP:	Midland, 1X 79701			City State ZIP:	ZIP:		Midland, TX 79701	TX 79	701		Reporting: Level II Level I	UST []	
hone:			Email:	Email: kiennings@ensolum.com	s@en	olum.	Nom				Deliverables: EDD	ADaPT (Other:	
Project Name:	Elvis Injection Line	n Line	Turr	Turn Around						ANALYSIS REQUEST	REQUEST	Preservative Codes	
Project Number:	03D2057011	111	✓ Routine	□ Rush		Pres. Code						None: NO DI Water: H ₂ O	
Project Location:			Due Date:					-				_	
Sampler's Name:	Conner Shore	lore	TAT starts the day received by	ne day receiv	ed by								
:# Oc			the lab, if re	the lab, if received by 4:30pm	30pm	S.I						H ₂ S0 ₄ : H ₂ NaOH: Na	
SAMPLE RECEIPT	Temp Blank:	No See No	Wet Ice:	(S)	No	9190	(0-					H₃PO₄: HP	
Samples Received Intact:	tact: (s) No	Thermometer ID:	ster ID:	TON SO	8	nen	300					NaHSO ₄ : NABIS	
Cooler Custody Seals:	Yes No	N/A Correction Factor:	Factor:	-0-	7	Вq	:A9					Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Is: Yes No WIR	Temperatu	Temperature Reading:	3.8	مد		3) 8			AGD-3241 Chain of Custody	of Custody	Zn Acetate+NaOH: Zn	
Total Containers:		Corrected	Corrected Temperature:	3. (2				1.700		_	NaOH+Ascorbic Acid: SAPC	
Sample Identification	iffication		-	Depth	Grab/	# of	IFOR	08) H	EX (S			Sample Comments	
		Sampled	Sampled		Comp	Cont	\dashv	-					_
PH01	S	10.19.22	006		ပ	-	×	×	×				
PH01	S	10.19.22	915	5,	ပ	-	×	×	×				
PH01	S	10.19.22	930	13'	G	-	×	×	×			Incident Number	
				\			-						
			\										
		18											
	101	1											
	/												
X													
A)													_
Total 200.7 / 6010	10 200.8 / 6020:		BRCRA 13PPM Texas	PPM Tex	(as 11	Į₹	Sb As Ba Be	За Ве	l m	Cr Co Cu Fe	Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag	Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
Sircle Method(s) an	Net	lyzed	TCLP / S	3PLP 6010): 8R(SRA (3b As	Ba B	S Cd Cr	Co Cu Pb Mn M	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U Ho	Hg: 1631 / 245.1 / 7470 / 7471	

Dogo 1

Relinquished by: (Signature)

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3241-1

 SDG Number: 03D2057011

Login Number: 3241 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

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10/26/2022

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3241-1 SDG Number: 03D2057011

List Source: Eurofins Midland

Login Number: 3241 List Number: 2 List Creation: 10/21/22 10:46 AM

Creator: Rodriguez, Leticia

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



ANALYTICAL REPORT

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

Laboratory Job ID: 890-3242-1

Laboratory Sample Delivery Group: 03D2057011

Client Project/Site: Elvis Injection Line

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings



Authorized for release by: 10/31/2022 9:38:06 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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Have a Question?



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

Client: Ensolum Laboratory Job ID: 890-3242-1 Project/Site: Elvis Injection Line

SDG: 03D2057011

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Definitions/Glossary

Job ID: 890-3242-1 Client: Ensolum Project/Site: Elvis Injection Line

SDG: 03D2057011

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier **Qualifier Description** MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. 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 Contains Free Liquid CFL CFU Colony Forming Unit Contains No Free Liquid CNF Duplicate Error Ratio (normalized absolute difference) DER Dil Fac **Dilution Factor** DΙ 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) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

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

Decision Level Concentration (Radiochemistry)

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

NC Not Calculated

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

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

PRFS 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: 890-3242-1 Project/Site: Elvis Injection Line SDG: 03D2057011

Job ID: 890-3242-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3242-1

Receipt

The samples were received on 10/20/2022 9:58 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 3.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH03 (890-3242-1), PH03 (890-3242-2) and PH03 (890-3242-3).

GC VOA

Method 8021B: The following samples were diluted due to the nature of the sample matrix: (880-20605-A-1-E MS) and (880-20605-A-1-F MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-38021 and analytical batch 880-38089 was outside the upper control 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 880-37503 and analytical batch 880-37444 was outside the upper control 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 880-37511 and analytical batch 880-37598 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum Job ID: 890-3242-1
Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH03 Lab Sample ID: 890-3242-1

Date Collected: 10/19/22 12:00 Matrix: Solid
Date Received: 10/20/22 09:58

Sample Depth: 1'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/26/22 14:13	10/29/22 02:15	1
Toluene	< 0.00199	U	0.00199	mg/Kg		10/26/22 14:13	10/29/22 02:15	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/26/22 14:13	10/29/22 02:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/26/22 14:13	10/29/22 02:15	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/26/22 14:13	10/29/22 02:15	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/26/22 14:13	10/29/22 02:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			10/26/22 14:13	10/29/22 02:15	1
1,4-Difluorobenzene (Surr)	94		70 - 130			10/26/22 14:13	10/29/22 02:15	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	Ü	0.00398	mg/Kg			10/30/22 21:36	1
Method: SW846 8015 NM - Diese			•					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Dieso Analyte Total TPH		Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 10/24/22 09:48	Dil Fac
Analyte Total TPH	Result <50.0	Qualifier U	50.0		<u>D</u>	Prepared		
Analyte Total TPH Method: SW846 8015B NM - Die	Result <50.0 sel Range Orga	Qualifier U	50.0		<u>D</u>	Prepared Prepared		
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics	Result <50.0 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 50.0	mg/Kg	_ =		10/24/22 09:48	1
Analyte	Result <50.0 sel Range Orga	Qualifier U nics (DRO) Qualifier U	RL 50.0 (GC)	mg/Kg	_ =	Prepared	10/24/22 09:48 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 sel Range Orga Result <50.0	Qualifier U nics (DRO) Qualifier U	(GC) RL 50.0	mg/Kg Unit mg/Kg	_ =	Prepared 10/21/22 13:50	10/24/22 09:48 Analyzed 10/21/22 23:36	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 10/21/22 13:50 10/21/22 13:50	10/24/22 09:48 Analyzed 10/21/22 23:36 10/21/22 23:36	1 Dil Fac 1
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 10/21/22 13:50 10/21/22 13:50 10/21/22 13:50	Analyzed 10/21/22 23:36 10/21/22 23:36 10/21/22 23:36	1 Dil Fac 1 1
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <50.0	Qualifier U nics (DRO) Qualifier U U	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared	Analyzed 10/21/22 23:36 10/21/22 23:36 10/21/22 23:36 Analyzed	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.0	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared 10/21/22 13:50	Analyzed 10/21/22 23:36 10/21/22 23:36 10/21/22 23:36 Analyzed 10/21/22 23:36	1 Dil Fac 1 Dil Fac 1
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 10/21/22 13:50 10/21/22 13:50 10/21/22 13:50 Prepared 10/21/22 13:50	Analyzed 10/21/22 23:36 10/21/22 23:36 10/21/22 23:36 Analyzed 10/21/22 23:36	1 Dil Fac 1 Dil Fac 1

Client Sample ID: PH03 Lab Sample ID: 890-3242-2

Date Collected: 10/19/22 12:15 Date Received: 10/20/22 09:58

Sample Depth: 8'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/26/22 14:13	10/29/22 02:36	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/26/22 14:13	10/29/22 02:36	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/26/22 14:13	10/29/22 02:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/26/22 14:13	10/29/22 02:36	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/26/22 14:13	10/29/22 02:36	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/26/22 14:13	10/29/22 02:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130			10/26/22 14:13	10/29/22 02:36	1

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Matrix: Solid

Job ID: 890-3242-1

Client: Ensolum Project/Site: Elvis Injection Line SDG: 03D2057011

Client Sample ID: PH03 Lab Sample ID: 890-3242-2

Date Collected: 10/19/22 12:15 Matrix: Solid Date Received: 10/20/22 09:58

Sample Depth: 8'

Method: SW846 8021B - Vo	olatile Organic Compounds	(GC) (Continued)
--------------------------	---------------------------	------------------

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1 4-Difluorobenzene (Surr)	9.3	70 - 130	10/26/22 14:13	10/29/22 02:36	1

Method: TAL	SOP Total	RTFY - Tota	I RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/30/22 21:36	1

Mothod:	SW846 8015	NM - Diesel	Rango Organio	e (DRO) (GC)

method ever the property and pr								
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Total TPH	<50.0 U	50.0	mg/Kg			10/24/22 09:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 23:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 23:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 23:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87	70 - 130	10/21/22 13:50	10/21/22 23:57	1
o-Terphenyl	101	70 - 130	10/21/22 13:50	10/21/22 23:57	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Quali	ifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4810	24.9	mg/Kg			10/23/22 21:28	5

Client Sample ID: PH03 Lab Sample ID: 890-3242-3

Date Collected: 10/19/22 12:30 Date Received: 10/20/22 09:58

Sample Depth: 15'

Method: SW846	0024D	1/-1-4:1-	O	C	α
i wemon: 50046	OUZID -	voiatile	Organic	Compounds	1136.1

micriod. 04040 0021B - Volutile Organic Compounds (CO)													
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac					
Benzene	<0.00200	U	0.00200	mg/Kg		10/26/22 14:13	10/29/22 02:56	1					
Toluene	<0.00200	U	0.00200	mg/Kg		10/26/22 14:13	10/29/22 02:56	1					
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/26/22 14:13	10/29/22 02:56	1					
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/26/22 14:13	10/29/22 02:56	1					
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/26/22 14:13	10/29/22 02:56	1					
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/26/22 14:13	10/29/22 02:56	1					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac					
4-Bromofluorobenzene (Surr)	117		70 - 130			10/26/22 14:13	10/29/22 02:56	1					

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	10/26/22 14:13	10/29/22 02:56	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/26/22 14:13	10/29/22 02:56	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	mg/Kg			10/30/22 21:36	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 09:48	1

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Matrix: Solid

Client Sample Results

Client: Ensolum
Project/Site: Elvis Injection Line

Job ID: 890-3242-1
SDG: 03D2057011

Client Sample ID: PH03 Lab Sample ID: 890-3242-3

Date Collected: 10/19/22 12:30 Matrix: Solid
Date Received: 10/20/22 09:58

Sample Depth: 15'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/22/22 00:18	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/22/22 00:18	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:50	10/22/22 00:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			10/21/22 13:50	10/22/22 00:18	1
o-Terphenyl	95		70 - 130			10/21/22 13:50	10/22/22 00:18	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	ography - S	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

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Surrogate Summary

Client: Ensolum

Project/Site: Elvis Injection Line

Job ID: 890-3242-1

SDG: 03D2057011

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-20605-A-1-E MS	Matrix Spike	101	92	
880-20605-A-1-F MSD	Matrix Spike Duplicate	102	90	
890-3242-1	PH03	118	94	
890-3242-2	PH03	129	93	
890-3242-3	PH03	117	91	
LCS 880-37911/1-A	Lab Control Sample	99	91	
LCSD 880-37911/2-A	Lab Control Sample Dup	101	91	
MB 880-37911/5-A	Method Blank	102	87	
MB 880-38021/5-A	Method Blank	72	60 S1-	

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 Li
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-3240-A-2-C MS	Matrix Spike	82	84	
390-3240-A-2-D MSD	Matrix Spike Duplicate	79	81	
390-3242-1	PH03	75	86	
390-3242-2	PH03	87	101	
390-3242-3	PH03	83	95	
LCS 880-37503/2-A	Lab Control Sample	90	100	
LCSD 880-37503/3-A	Lab Control Sample Dup	99	110	
MB 880-37503/1-A	Method Blank	118	133 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Ensolum Job ID: 890-3242-1 Project/Site: Elvis Injection Line SDG: 03D2057011

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37911/5-A

Matrix: Solid

Analysis Batch: 38089

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37911

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/26/22 14:13	10/29/22 01:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/26/22 14:13	10/29/22 01:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/26/22 14:13	10/29/22 01:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/26/22 14:13	10/29/22 01:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/26/22 14:13	10/29/22 01:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/26/22 14:13	10/29/22 01:12	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	10/26/22 14:13	10/29/22 01:12	1
1,4-Difluorobenzene (Surr)	87		70 - 130	10/26/22 14:13	10/29/22 01:12	1

Lab Sample ID: LCS 880-37911/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 38089

Prep Type: Total/NA

Prep Batch: 37911

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.07484 mg/Kg 75 70 - 130 Toluene 0.100 0.07671 mg/Kg 77 70 - 130 Ethylbenzene 0.100 0.07425 mg/Kg 74 70 - 130 70 - 130 0.200 0.1480 m-Xylene & p-Xylene mg/Kg 74 0.100 0.08609 o-Xylene mg/Kg 86 70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1,4-Difluorobenzene (Surr)	91	70 - 130

Lab Sample ID: LCSD 880-37911/2-A

Matrix: Solid

Analysis Batch: 38089

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37911

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07938		mg/Kg		79	70 - 130	6	35
Toluene	0.100	0.08189		mg/Kg		82	70 - 130	7	35
Ethylbenzene	0.100	0.08032		mg/Kg		80	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1556		mg/Kg		78	70 - 130	5	35
o-Xylene	0.100	0.08950		mg/Kg		89	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1.4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 880-20605-A-1-E MS

Matrix: Solid

Analysis Batch: 38089

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 37911

Sample Sample Spike MS MS Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits <0.00201 U F1 0.100 0.08080 80 Benzene mg/Kg 70 - 130 Toluene <0.00201 UF1 0.100 0.07923 mg/Kg 78 70 - 130

QC Sample Results

Job ID: 890-3242-1 Client: Ensolum Project/Site: Elvis Injection Line SDG: 03D2057011

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

Lab Sample ID: 880-20605-A-1-E MS

Lab Sample ID: 880-20605-A-1-F MSD

Matrix: Solid

Analysis Batch: 38089

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

Prep Batch: 37911

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <0.00201 UF1 0.100 Ethylbenzene 0.07637 76 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00402 UF1 0.200 0.1440 mg/Kg 72 70 - 130 0.100 0.08398 o-Xylene <0.00201 U 84 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 37911

Matrix: Solid Analysis Batch: 38089

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U F1	0.0990	0.06610	F1	mg/Kg		66	70 - 130	20	35
Toluene	<0.00201	U F1	0.0990	0.06481	F1	mg/Kg		65	70 - 130	20	35
Ethylbenzene	<0.00201	U F1	0.0990	0.06337	F1	mg/Kg		64	70 - 130	19	35
m-Xylene & p-Xylene	<0.00402	U F1	0.198	0.1224	F1	mg/Kg		62	70 - 130	16	35
o-Xylene	<0.00201	U	0.0990	0.07052		mg/Kg		71	70 - 130	17	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-38021/5-A

Matrix: Solid

Analysis Batch: 38089

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38021

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:34	10/28/22 13:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:34	10/28/22 13:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:34	10/28/22 13:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/27/22 13:34	10/28/22 13:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:34	10/28/22 13:48	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/27/22 13:34	10/28/22 13:48	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	10/27/22 13:34	10/28/22 13:48	1
1,4-Difluorobenzene (Surr)	60	S1-	70 - 130	10/27/22 13:34	10/28/22 13:48	1

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

Lab Sample ID: MB 880-37503/1-A

Matrix: Solid

Analysis Batch: 37444

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 37503

мв мв Result Qualifier RL Unit Prepared <50.0 U 50.0 mg/Kg 10/21/22 13:50 10/21/22 19:50 Gasoline Range Organics

(GRO)-C6-C10

Client: Ensolum Job ID: 890-3242-1
Project/Site: Elvis Injection Line SDG: 03D2057011

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

Lab Sample ID: MB 880-37503/1-A

Matrix: Solid

Analysis Batch: 37444

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37503

MB	MB						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 19:50	1
<50.0	U	50.0	mg/Kg		10/21/22 13:50	10/21/22 19:50	1
МВ	MB						
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
118		70 - 130			10/21/22 13:50	10/21/22 19:50	1
133	S1+	70 - 130			10/21/22 13:50	10/21/22 19:50	1
	Result	MB MB Qualifier	Result Qualifier RL <50.0	Result Qualifier RL Unit <50.0	Result Qualifier RL Unit D <50.0	Result Qualifier RL Unit D Prepared <50.0	Result Qualifier RL Unit D Prepared Analyzed <50.0

Lab Sample ID: LCS 880-37 Matrix: Solid	503/2-A						Client	Sample	ID: Lab Control Sam Prep Type: Total
Analysis Batch: 37444									Prep Batch: 375
			Spike	LCS	LCS				%Rec
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics			1000	858.1		mg/Kg		86	70 - 130
(GRO)-C6-C10									
Diesel Range Organics (Over			1000	774.2		mg/Kg		77	70 - 130
C10-C28)									
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	90		70 - 130						
o-Terphenyl	100		70 - 130						

Lab Sample ID: LCSD 880-37503/3-A Matrix: Solid Analysis Batch: 37444				Clier	nt Sam	nple ID:	•	ol Sampl Type: To Batch:	tal/NA
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1041		mg/Kg		104	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	1000	902.2		mg/Kg		90	70 - 130	15	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 890-3240-A Matrix: Solid Analysis Batch: 37444	-2-C MS							Client	Prep	: Matrix Spike Type: Total/NA Batch: 37503
_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1086		mg/Kg		109	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	781.6		mg/Kg		76	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	82		70 - 130							
o-Terphenyl	84		70 - 130							

Lab Sample ID: 890-3240-A-2-D MSD

Job ID: 890-3242-1

mg/Kg

Client: Ensolum Project/Site: Elvis Injection Line SDG: 03D2057011

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

Client Sample ID: Matrix Spike Duplicate

74

Prep Type: Total/NA Prep Batch: 37503

70 - 130

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Analysis Batch: 37444 Sample Sample Spike MSD MSD RPD Result Qualifier RPD Limit Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 U 998 1014 mg/Kg 102 70 - 130 7 20 (GRO)-C6-C10

762.1

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Diesel Range Organics (Over C10-C28)

Matrix: Solid

MSD MSD

<49.9 U

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	81		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37511/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Soluble

Analysis Batch: 37598

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/23/22 19:22	1

Lab Sample ID: LCS 880-37511/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37598

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	259.6		mg/Kg		104	90 - 110	

Lab Sample ID: LCSD 880-37511/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37598

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	259.0		mg/Kg		104	90 - 110	0	20	

Lab Sample ID: 890-3239-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 37598

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1220		1240	2517		mg/Kg		105	90 - 110	

Lab Sample ID: 890-3239-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 37598

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1220		1240	2519		mg/Kg		105	90 - 110	0	20

QC Sample Results

Client: Ensolum Job ID: 890-3242-1 Project/Site: Elvis Injection Line

SDG: 03D2057011

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3240-A-3-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble Analysis Batch: 37598

Sample Sample Spike MS MS %Rec Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits Chloride 1120 248 1334 4 mg/Kg 87 90 - 110

Lab Sample ID: 890-3240-A-3-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

Analysis Batch: 37598 Sample Sample Spike MSD MSD %Rec RPD

Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 1120 248 1329 4 mg/Kg 85 90 - 110 0 20

QC Association Summary

Client: Ensolum Job ID: 890-3242-1
Project/Site: Elvis Injection Line SDG: 03D2057011

GC VOA

Prep Batch: 37911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3242-1	PH03	Total/NA	Solid	5035	
890-3242-2	PH03	Total/NA	Solid	5035	
890-3242-3	PH03	Total/NA	Solid	5035	
MB 880-37911/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37911/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37911/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20605-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-20605-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 38021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-38021/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 38089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3242-1	PH03	Total/NA	Solid	8021B	37911
890-3242-2	PH03	Total/NA	Solid	8021B	37911
890-3242-3	PH03	Total/NA	Solid	8021B	37911
MB 880-37911/5-A	Method Blank	Total/NA	Solid	8021B	37911
MB 880-38021/5-A	Method Blank	Total/NA	Solid	8021B	38021
LCS 880-37911/1-A	Lab Control Sample	Total/NA	Solid	8021B	37911
LCSD 880-37911/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37911
880-20605-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	37911
880-20605-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	37911

Analysis Batch: 38188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3242-1	PH03	Total/NA	Solid	Total BTEX	
890-3242-2	PH03	Total/NA	Solid	Total BTEX	
890-3242-3	PH03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 37444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3242-1	PH03	Total/NA	Solid	8015B NM	37503
890-3242-2	PH03	Total/NA	Solid	8015B NM	37503
890-3242-3	PH03	Total/NA	Solid	8015B NM	37503
MB 880-37503/1-A	Method Blank	Total/NA	Solid	8015B NM	37503
LCS 880-37503/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37503
LCSD 880-37503/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37503
890-3240-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	37503
890-3240-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37503

Prep Batch: 37503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3242-1	PH03	Total/NA	Solid	8015NM Prep	
890-3242-2	PH03	Total/NA	Solid	8015NM Prep	
890-3242-3	PH03	Total/NA	Solid	8015NM Prep	
MB 880-37503/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37503/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Elvis Injection Line

Job ID: 890-3242-1
SDG: 03D2057011

GC Semi VOA (Continued)

Prep Batch: 37503 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-37503/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3240-A-2-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3240-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3242-1	PH03	Total/NA	Solid	8015 NM	
890-3242-2	PH03	Total/NA	Solid	8015 NM	
890-3242-3	PH03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3242-1	PH03	Soluble	Solid	DI Leach	
890-3242-2	PH03	Soluble	Solid	DI Leach	
890-3242-3	PH03	Soluble	Solid	DI Leach	
MB 880-37511/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37511/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37511/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3239-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3239-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-3240-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3240-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 37598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3242-1	PH03	Soluble	Solid	300.0	37511
890-3242-2	PH03	Soluble	Solid	300.0	37511
890-3242-3	PH03	Soluble	Solid	300.0	37511
MB 880-37511/1-A	Method Blank	Soluble	Solid	300.0	37511
LCS 880-37511/2-A	Lab Control Sample	Soluble	Solid	300.0	37511
LCSD 880-37511/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37511
890-3239-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	37511
890-3239-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	37511
890-3240-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	37511
890-3240-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	37511

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Client: Ensolum

Date Received: 10/20/22 09:58

Project/Site: Elvis Injection Line

	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	37911	10/26/22 14:13	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38089	10/29/22 02:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38188	10/30/22 21:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			37629	10/24/22 09:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37503	10/21/22 13:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37444	10/21/22 23:36	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	37511	10/21/22 14:12	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	37598	10/23/22 21:23	CH	EET MID

Lab Sample ID: 890-3242-2

Matrix: Solid

Date Collected: 10/19/22 12:15 Date Received: 10/20/22 09:58

Client Sample ID: PH03

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.02 g 5 mL 37911 10/26/22 14:13 MNR EET MID Total/NA 8021B 10/29/22 02:36 **EET MID** Analysis 1 5 mL 5 mL 38089 MNR Total/NA Total BTEX 38188 10/30/22 21:36 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 37629 10/24/22 09:48 SM **EET MID** Total/NA Prep 8015NM Prep 37503 10.01 g 10 mL 10/21/22 13:50 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 37444 10/21/22 23:57 SM **EET MID** Soluble Leach DI Leach 5.02 g 50 mL 37511 10/21/22 14:12 KS **EET MID** Soluble Analysis 300.0 5 50 mL 50 mL 37598 10/23/22 21:28 СН **EET MID**

Client Sample ID: PH03 Lab Sample ID: 890-3242-3

Date Collected: 10/19/22 12:30 Date Received: 10/20/22 09:58

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	37911	10/26/22 14:13	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38089	10/29/22 02:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38188	10/30/22 21:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			37629	10/24/22 09:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37503	10/21/22 13:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37444	10/22/22 00:18	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	37511	10/21/22 14:12	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	37598	10/23/22 21:33	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Elvis Injection Line

Job ID: 890-3242-1
SDG: 03D2057011

Laboratory: Eurofins Midland

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

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

3

4

6

10

11

13

Method Summary

Client: Ensolum

Project/Site: Elvis Injection Line

Job ID: 890-3242-1

SDG: 03D2057011

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

Protocol References:

DI Leach

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Deionized Water Leaching Procedure

Laboratory References:

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

Eurofins Carlsbad

2

4

5

7

EET MID

ASTM

10

13

Sample Summary

Client: Ensolum

Project/Site: Elvis Injection Line

Job ID: 890-3242-1

SDG: 03D2057011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
890-3242-1	PH03	Solid	10/19/22 12:00	10/20/22 09:58	-
890-3242-2	PH03	Solid	10/19/22 12:15	10/20/22 09:58	8
890-3242-3	PH03	Solid	10/19/22 12:30	10/20/22 09:58	15

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Page

www.xenco.com

Work Order No:

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

sed Date: 08/25/2020 Rev. 2020

13

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

Environment Testing

: eurofins

Xenco

Project Manager:	Kalei Jennings			Bill to: (if differ	rent)	Kale	Kalei Jennings	S				Wor	Work Order Comments	9	
Company Name:	Ensolum, LLC			Company Name:	me:	Ensc	Ensolum, LLC	0			Program: UST/PST		☐ PRP ☐ Brownfields ☐ RRC [RRC Sup	☐ Superfund ☐
Address:	601 N Marienfeld St Suite 400	Suite 400		Address:		601	√ Marier	601 N Marienfeld St Suite 400	uite 400		State of Project:	#	!		E
City, State ZIP:	Midland, TX 79701			City, State ZII	à	Midk	Midland, TX 79701	19701			Reporting: Leve	II Level	Reporting: Level II		Level IV
Phone:			Email:	Email: kjennings@e		ensolum.com					Deliverables: EDD	00	ADaPT E	Other:	
Project Name:	Elvis Injection Line	Line	Turm	Turn Around						ANALYSIS	ANALYSIS REQUEST		Prese	Preservative Codes	sapo
Project Number:	03D2057011	11	✓ Routine	□ Rush	Pres. Code	* a							None: NO	N IQ	DI Water: H ₂ O
Project Location:			Due Date:										Cool: Cool		MeOH: Me
Sampler's Name: PO #:	Conner Shore	ore	TAT starts the	TAT starts the day received by the lab, if received by 4:30pm									HCL: HC H ₂ S0 ₄ : H ₂		HNO ₃ : HN NaOH: Na
SAMPLE RECEIPT	PT Temp Blank:	(Yes) No	Wet Ice:	o _N	19191				=			_	H ₃ PO ₄ : HP	0	
Samples Received Intact:	ntact: No	Thermometer ID:	ter ID:	The EB									NaHSO4: NABIS	NABIS	
Cooler Custody Seals:	۶	A Correction Factor:	Factor:	C. G-				_					Na ₂ S ₂ O ₃ : NaSO ₃	NaSO ₃	*****
Sample Custody Seals:	als: Yes No N/A	_	Temperature Reading:	3.8		3) S							Zn Acetate	Zn Acetate+NaOH: Zn	
Total Containers:		Corrected	Corrected Temperature:	3.6	٦	IDE	(910	1208	080	090-3242 Chain of Custody	of Custody		NaOH+Asc	NaOH+Ascorbic Acid: SAPC	SAPC
Sample Identification	ntification Matrix	Date Sampled	Time	Depth Grab/ Comp	b/ # of np Cont	снгов)8) H9T.) ХЭТВ					Sami	Sample Comments	ents
PH03	S S	10.19.22	1200	1' G	7	×	×	×					1		
PH03	S S	10.19.22	1215	8, G		×	×	×							
PH03	3	10.19.22	1230	15' G	-	×	×	×					Inci	Incident Number	ber
		1	1												
		10													
	1	1													
	K														
	1														
)					H										
Total 200.7 / 6010	110 200.8 / 6020:		BRCRA 13F	13PPM Texas	11 A	Sb A	Sb As Ba E	le B Ca	Ca Cr	Co Cu Fe	Pb Mg Mn Mo N	i K Se Ag	Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn	in U V Zn	
Circle Method(s) a	Circle Method(s) and Metal(s) to be analyzed	yzed	TCLP / S	TCLP / SPLP 6010: 8	BRCRA	dS A	Sb As Ba	Be Cd Cr	Cr Co C	Su Pb Mn	Co Cu Pb Mn Mo Ni Se Ag Tl U	H	Hg: 1631 / 245.1 / 7470 / 7471	170 / 7471	
Votice: Signature of this	Votice: 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	nt of samples co	pnstitutes a valid	purchase order fr	rom clie	nt compa	η to Euro	fins Xenco,	its affiliates	s and subcontra	ictors. It assigns standaro	terms and cor	nditions		

Relinquished by: (Signature)

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3242-1 SDG Number: 03D2057011

Login Number: 3242 List Source: Eurofins Carlsbad

List Number: 1 Creator: Stutzman, Amanda

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

<6mm (1/4").

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3242-1 SDG Number: 03D2057011

List Source: Eurofins Midland

Login Number: 3242 List Number: 2 List Creation: 10/21/22 10:46 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").



APPENDIX E

Final C-141

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible l	Party			OGRID	OGRID				
Contact Nam	e			Contact T	elephone				
Contact emai	1			Incident #	t (assigned by OCL	0)			
Contact maili	ng address			<u> </u>					
			Location	of Release S	ource				
Latitude				Longitude					
			(NAD 83 in dec	cimal degrees to 5 deci	mal places)				
Site Name				Site Type					
Date Release	Discovered			API# (if ap	plicable)				
Unit Letter	Section	Township	Range	Cou	nty				
Surface Owner				l Volume of		pe volumes provided below)			
Material(s) Released (Select all that apply and attach calcula Crude Oil Volume Released (bbls)			calculations of specific		overed (bbls)				
Produced	Water	Volume Release	d (bbls)		Volume Rec	overed (bbls)			
		Is the concentrate produced water	ion of dissolved c	hloride in the	☐ Yes ☐ No				
Condensat	te	Volume Release			Volume Recovered (bbls)				
Natural G	as	Volume Release	d (Mcf)		Volume Recovered (Mcf)				
Other (describe) Volume/Weight Released (provide units			e units)	Volume/Weight Recovered (provide units)					
Cause of Rele	ease								

Received by OCD: 12/28/2022/8:03:48 PM State of New Mexico
Page 2 Oil Conservation Division

	PageH34eof 1	37
Incident ID		
District RP		
Facility ID		
4 1' 4' ID		

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the respo	nsible party consider this a major release?
If YES, was immediate no	otice given to the OCD? By whom? To whether the other street by th	nom? When and by what means (phone, email, etc)?
	Initial R	esponse
The responsible	party must undertake the following actions immediate	y unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.	
☐ The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or	likes, absorbent pads, or other containment devices.
☐ All free liquids and re	ecoverable materials have been removed an	d managed appropriately.
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.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release not ment. The acceptance of a C-141 report by the Cate and remediate contamination that pose a through	best of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name		Title:
Signature:	tan Japange	Date:
email:		Telephone:
OCD Only		
Received by: Jocelyn	Harimon	Date:05/16/2022

L48 Spill Volume Estimate Form Received by OCD: 12/28/2022/8:03:48 PM Name & Number: elvis injection#1 NAPP2213642290 of 137 Asset Area: Maljamar Release Discovery Date & Time: 5/4/2022 9:03 Release Type: Produced Water Provide any known details about the event: injection line rupture Spill Calculation - Subsurface Spill - Rectangle Was the release on pad or off-pad? See reference table below Has it rained at least a half inch in the last 24 hours? See reference table below Convert Irregular shape Total Estimated Length Width Depth Estimated volume of each area into a series of Soil Spilled-Fluid Saturation Volume of Spill (ft.) (ft.) (in.) (bbl.) rectangles (bbl.) 15.12% 3.566 Rectangle A 30.0 53.0 1.00 23.585 Rectangle B 50.0 52.0 4.00 15.12% 154.267 23.325 Rectangle C 18.0 20.0 4.00 15.12% 21.360 3.230 Rectangle D 0.000 0.000 Rectangle E 0.000 0.000 Rectangle F 0.000 0.000 Rectangle G 0.000 0.000 Rectangle H 0.000 0.000 Rectangle I 0.000 0.000 0.000 0.000 Released to Imaging: 1/24/2023 2:09:07 PM1 30,121 Total Volume Release:

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

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

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

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

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

CONDITIONS

Action 107046

CONDITIONS

Operator:	OGRID:
CONOCOPHILLIPS COMPANY	217817
600 W. Illinois Avenue	Action Number:
Midland, TX 79701	107046
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Creat	ted By	Condition	Condition Date
jhar	rimon	None	5/16/2022

te of New Mexico

Incident ID	NAPP2212531906
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	50-100 (feet bgs)		
Did this release impact groundwater or surface water?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No		
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No		
Did the release impact areas not on an exploration, development, production, or storage site?	X Yes No		
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.			
Characterization Report Checklist: Each of the following items must be included in the report.			
 \infty Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well \infty Field data 	ls.		
Data table of soil contaminant concentration data			
Depth to water determination			
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release			
☑ Boring or excavation logs☑ Photographs including date and GIS information			
☐ Fhotographs including date and Ols information ☐ ☐ Topographic/Aerial maps			
☐ Laboratory data including chain of custody			

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

Received by OCD: 12/28/2022 8:03:48 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

HSE Specialist

	Page 133 0f 13
Incident ID	NAPP2212531906
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release no public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thraddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	oCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Bryce Wagoner	Title: Permian HSE Specialist II
Signature: Bryce.Wagoner@mavresources.com	Date:12/28/2022 Telephone: 928-241-1862
email:	
OCD Only	
Received by: Jocelyn Harimon	Date: 12/29/2022

	Page 136 of 1.	<i>37</i>
Incident ID	nAPP2213642290	
District RP		
Facility ID		
Application ID		

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.			
 Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 			
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.			
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.			
Extents of contamination must be fully delineated.			
Contamination does not cause an imminent risk to human health, the environment, or groundwater.			
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name: _Bryce Wagoner Title: _Permian HSE Specialist II			
Signature: Date:12/28/2022			
email: _Bryce.Wagoner@mavresources.com Telephone:928-241-1862			
OCD Only			
Received by: Jocelyn Harimon Date: 12/28/2022			
Approved			
Signature: Dannifar Nobili Date: 01/24/2023			

District I
1625 N. French Dr., Hobbs, NM 88240
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District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

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

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

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

CONDITIONS

Action 170836

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	170836
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved.	1/24/2023