E N S O L U M

July 20, 2023

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

Re: Closure Request SEMU Permian Battery Incident Number NAPP2303271574 Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Permian, LLC (Maverick), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the SEMU Permian Battery (Site). The purpose of the Site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of crude oil and produced water at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, Maverick is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2303271574.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 19, Township 20 South, Range 38 East, in Lea County, New Mexico (32.5584° N, 103.1906° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On January 10, 2023, corrosion of a flowline resulted in the release of approximately 3.68 barrels (bbls) of crude oil and 0.92 bbls of produced water onto the surrounding pasture. No released fluids were recovered. Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) on a *Release Notification Form C-141* (Form C-141) on January 19, 2023. The release was assigned Incident Number NAPP2303271574.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is estimated to be between 51 feet and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 323307103113601, located

Maverick Permian, LLC Closure Request SEMU Permian Battery

approximately 0.47 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 82.73 feet bgs and a total depth of 115 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well record is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a intermittent stream, located approximately 2.6 miles east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area 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.

SITE ASSESSMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On January 11, 2023, assessment activities were conducted at the Site to evaluate the release extent based on information provided on the Form C-141 and visible surface staining in the release area. Seven assessment soil samples (SS01 through SS07) were collected within and around the release extent at a depth of 0.25 feet bgs to assess the extent of the release. The soil samples were field screened for volatile aromatic hydrocarbons (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach[®] chloride QuanTab[®] test strips. The release extent and assessment 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.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following constituents of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 4500.

Laboratory analytical results for assessment soil samples SS01 through SS03, collected within the release extent, indicated that TPH concentrations exceeded the Site Closure Criteria and reclamation requirements. Laboratory analytical results for assessment soil samples SS04 through SS07, collected around the release extent, indicated that all COC concentrations were compliant with the most stringent Table I Closure Criteria and provided lateral definition of the release. Based on visible staining in the



Maverick Permian, LLC Closure Request SEMU Permian Battery

release area and laboratory analytical results for assessment soil samples SS01 through SS03, excavation activities were warranted.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between June 19 and June 20, 2023, Ensolum personnel were at the Site to oversee excavation of impacted soil as indicated by visible staining in the release area and laboratory analytical results for assessment soil samples SS01 through SS03. To direct excavation activities, soil was field screened for VOCs and chloride. Excavation activities were performed utilizing a backhoe and transport vehicles. The excavation was completed to a depth of 4 feet bgs.

Following removal of impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS06 were collected from the floor of the excavation at a depth of 4 feet bgs. Composite soil samples SW01 and SW02 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The excavation soil samples were handled and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 3.

Laboratory analytical results for excavation soil samples FS01 through FS06, SW01, and SW02 indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements. Laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix C.

The excavation measured approximately 1,085 square feet in areal extent. A total of approximately 165 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Disposal Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the January 10, 2023, release of crude oil and produced water. Laboratory analytical results for the excavation soil samples indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Based on the laboratory analytical results, no further remediation is required. Maverick will backfill the excavation with material purchased locally and recontour the Site to match pre-existing conditions.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be between 51 feet and 100 feet bgs and no sensitive receptors were identified near the release extent. Maverick believes the remedial actions completed are protective of human health, the environment, and groundwater and respectfully requests closure for Incident NAPP2303271574. NMOCD Notifications are included in Appendix D and the final Form C-141 is included in Appendix E.



Maverick Permian, LLC Closure Request SEMU Permian Battery

If you have any questions or comments, please contact Ms. Aimee Cole at (720) 384-7365 or acole@ensolum.com.

Sincerely, **Ensolum, LLC**

Kalui Jenningz

Kalei Jennings Senior Scientist

mée Cole

Aimee Cole Senior Managing Scientist

cc: Bryce Wagoner, Maverick Natural Resources Bureau of Land Management

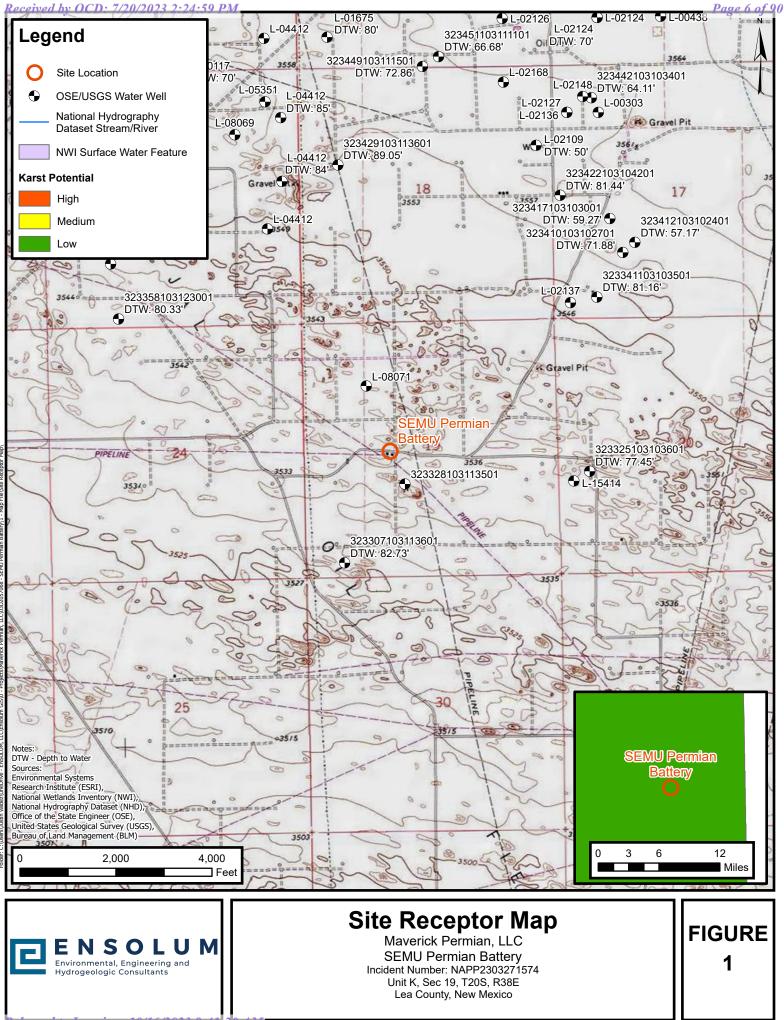
Appendices:

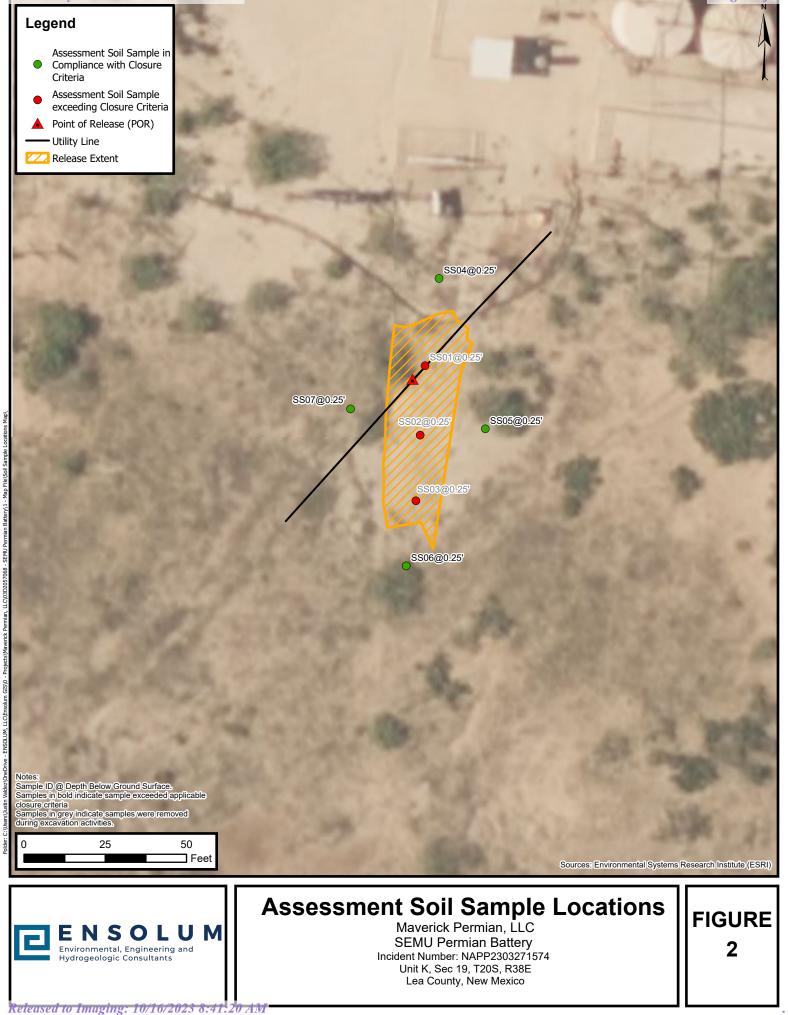
- Figure 1 Site Receptor Map
- Figure 2 Assessment Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Table 1
 Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Laboratory Analytical Reports & Chain of Custody Documentation
- Appendix D NMOCD Notifications
- Appendix E Final C-141

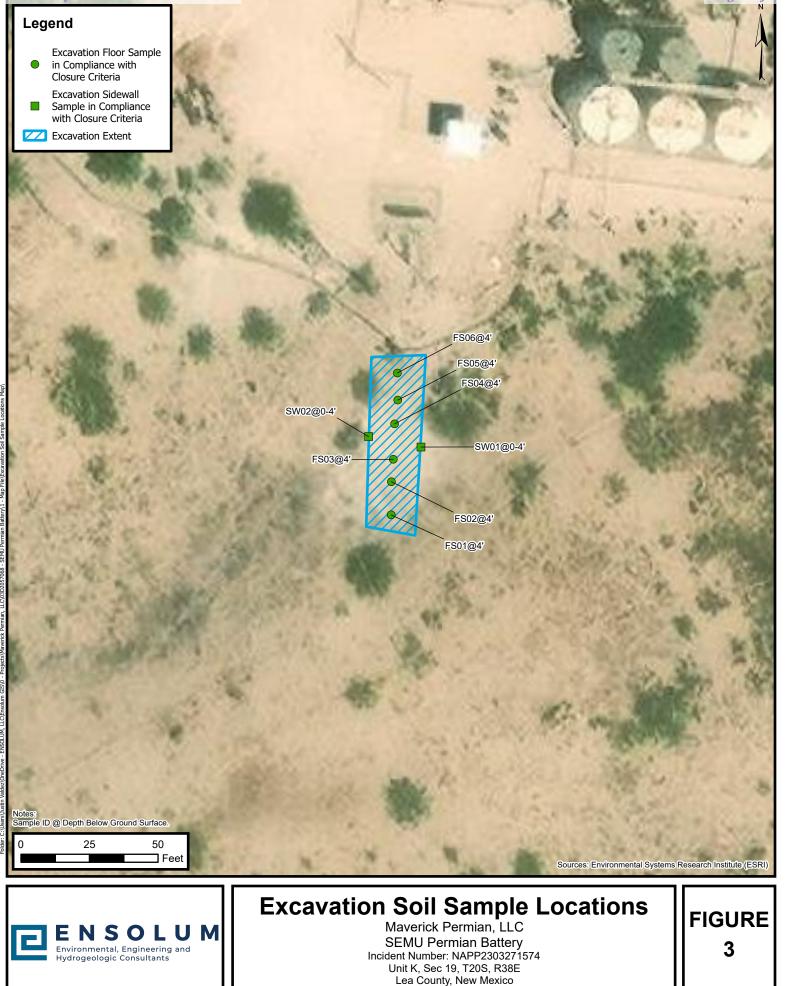




FIGURES









TABLES

.

ENSOLUM

				SEI Mav	TABLE 1LE ANALYTICAMU Permian Battverick Permian, ICounty, New Me	ery _LC				
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
				Asse	ssment Soil San	nples				
SS01*	01/11/2023	0.25	0.489	71.6	2,040	3,980	<250	6,020	6,020	8.36
SS02*	01/11/2023	0.25	<0.201	12.3	<250	1,050	<250	1,050	1,050	56.7
SS03*	01/11/2023	0.25	0.359	35.2	1,220	1,820	<250	3,040	3,040	<4.97
SS04*	01/11/2023	0.25	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	<4.98
SS05*	01/11/2023	0.25	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	45.9
SS06*	01/11/2023	0.25	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	11.9
SS07*	01/11/2023	0.25	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	53.7
				Excava	tion Floor Soil S	amples				
FS01	06/20/2023	4	<0.050	<0.300	<10.0	50.1	34.6	50.1	84.7	48.0
FS02	06/20/2023	4	<0.050	<0.300	<10.0	48.0	43.1	58.0	91.1	32.0
FS03	06/20/2023	4	<0.050	<0.300	<10.0	20.0	12.3	20.0	32.3	32.0
FS04	06/20/2023	4	<0.050	<0.300	<10.0	17.4	11.7	17.4	29.1	64.0
FS05	06/20/2023	4	<0.050	<0.300	<10.0	37.2	25.6	37.2	62.8	32.0
FS06	06/20/2023	4	<0.050	<0.300	<10.0	45.6	35.5	45.6	81.1	16.0
				Excavati	on Sidewall Soil	Samples				
SW01*	06/20/2023	0 - 4	<0.050	<0.300	<10.0	22.9	15.1	22.9	38.0	<16.0
SW02*	06/20/2023	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

Grey text represents samples that have been excavated

* indicates sample was collected in area to be reclaimed after remediation is complete; reclamation standard in the top 4 feet is 600 mg/kg for chloride and 100 mg/kg for TPH.



APPENDIX A

Referenced Well Records

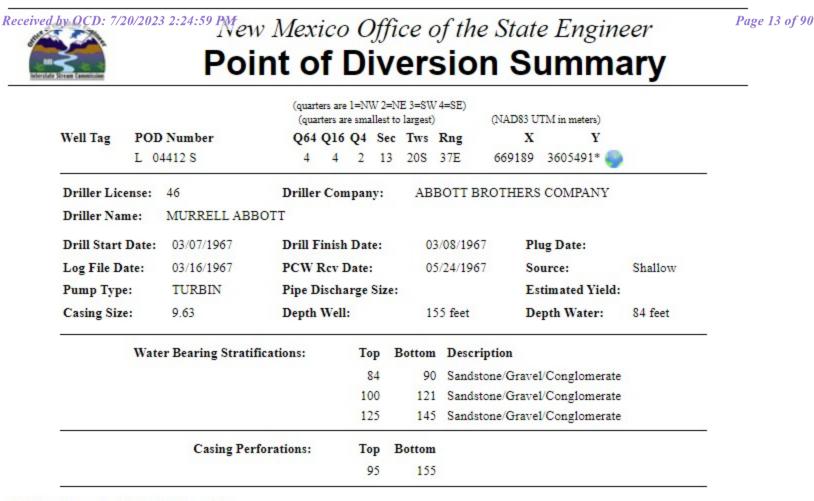
URGBdDDBB07/403:4:59001 20S.38E.19.312141

Lea County, New Mexico Latitude 32°33'07", Longitude 103°11'36" NAD27 Land-surface elevation 3,534 feet above NAVD88 The depth of the well is 115 feet below land surface. This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer. This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Date \$	Time \$	Ø Water-level date-time accuracy	Parameter \$ code	Water level, feet below land surface	Water level, feet above \$ specific vertical datum	Referenced vertical ≎ datum	Ø Status ≎	Method of measurement	Ø Mea age
1954-04-02		D	62610		3454.12	NGVD29	1	Z	
1954-04-02		D	62611		3455.23	NAVD88	1	Z	
1954-04-02		D	72019	78.77			1	Z	
1961-02-28		D	62610		3453.28	NGVD29	1	Z	
1961-02-28		D	62611		3454.39	NAVD88	1	Z	
1961-02-28		D	72019	79.61			1	Z	
1966-03-08		D	62610		3446.84	NGVD29	1	Z	
1966-03-08		D	62611		3447.95	NAVD88	1	Z	
1966-03-08		D	72019	86.05			1	Z	
1968-04-08		D	62610		3451.86	NGVD29	1	Z	
1968-04-08		D	62611		3452.97	NAVD88	1	Z	
1968-04-08		D	72019	81.03			1	Z	
1971-01-28		D	62610		3451.34	NGVD29	1	Z	
1971-01-28		D	62611		3452.45	NAVD88	1	Z	
1971-01-28		D	72019	81.55			1	Z	
1976-01-29		D	62610		3450.16	NGVD29	1	Z	
1976-01-29		D	62611		3451.27	NAVD88	1	Z	
1976-01-29 Released to Imaging	: 10/16/2023 8:41:20 A	D	72019	82.73			1	Z	



asuring \$ ency	Ø Source of measurement	Water- level ≎ approval status
		А
		А
		А
		А
		А
		А
		А
		А
		А
		A
		A
		A
		A
		A
		А
		А
		A



*UTM location was derived from PLSS - see Help

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

10/10/22 1:15 PM

POINT OF DIVERSION SUMMARY



APPENDIX B

Photographic Log





APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation

Received by OCD: 7/20/2023 2:24:59 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 1/30/2023 9:52:45 AM

JOB DESCRIPTION

SEMU Permian Battery SDG NUMBER 03D2057068

JOB NUMBER

890-3844-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

See page two for job notes and contact information.

Received by OCD: 7/20/2023 2:24:59 PM

Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 1/30/2023 9:52:45 AM

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

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

Laboratory Job ID: 890-3844-1 SDG: 03D2057068

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	6
Client Sample Results	7
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	17
Lab Chronicle	19
Certification Summary	20
Method Summary	21
Sample Summary	22
Chain of Custody	23
Receipt Checklists	25

2

Client: Ensolum
Project/Site: SEMU Permian Battery

Qualifiers

Deminions/Glossaly	
Job ID: 890-3844-1 SDG: 03D2057068	2
	3
	4

-		
GC VOA		
Qualifier	Qualifier Description	
F1	MS and/or MSD recovery exceeds control limits.	
F2	MS/MSD RPD exceeds control limits	5
S1+	Surrogate recovery exceeds control limits, high biased.	
U	Indicates the analyte was analyzed for but not detected.	
GC Semi VO	Α	
Qualifier	Qualifier Description	
*+	LCS and/or LCSD is outside acceptance limits, high biased.	
*1	LCS/LCSD RPD exceeds control limits.	8
F1	MS and/or MSD recovery exceeds control limits.	
F2	MS/MSD RPD exceeds control limits	0
S1-	Surrogate recovery exceeds control limits, low biased.	3
S1+	Surrogate recovery exceeds control limits, high biased.	
U	Indicates the analyte was analyzed for but not detected.	
HPLC/IC		
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	13
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

3

Definitions/Glossary

Client: Ensolum Project/Site: SEMU Permian Battery Job ID: 890-3844-1 SDG: 03D2057068

Glo	ssary (Co	ontinued)
Abbre	eviation	These commonly used abbreviations may or may not be present in this report.

TNTC

Too Numerous To Count

Eurofins Carlsbad

Client: Ensolum Project/Site: SEMU Permian Battery

Job ID: 890-3844-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3844-1

Receipt

The samples were received on 1/13/2023 2:13 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-3844-1), SS02 (890-3844-2) and SS03 (890-3844-3).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS01 (890-3844-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-44342 and analytical batch 880-44418 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-44231 and analytical batch 880-44896 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8015MOD NM: The laboratory control sample duplicate (LCSD) for preparation batch 880-44231 and analytical batch 880-44896 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28). These analytes were biased high in the LCSD but were acceptable in the corresponding LCS; therefore, the data have been reported.

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-44231/2-A), (LCSD 880-44231/3-A), (MB 880-44231/1-A), (890-3848-A-1-C MS) and (890-3848-A-1-D MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

Page 23 of 90

Job ID: 890-3844-1 SDG: 03D2057068

Client Sample ID: SS01

Project/Site: SEMU Permian Battery

Date Collected: 01/11/23 13:45 ed: 01/13/23 14:13 Da ate Rei oive

Date Received:	01/13/23
Sample Depth:	0.25'

Client: Ensolum

Lab	Sample	ID:	890	-38	844	4-1
					_	

Matrix: Solid

Obtaine 14.8 0.198 mgKg 01/1923 19:20 01/1923 19:30 1 http/branzene 13.2 0.198 mgKg 01/1923 19:20 01/1923 19:30 1 stylenes 5.2 0.396 mgKg 01/1923 18:30 1	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Singlibricance 19.2 0.198 mg/Kg 01/18/23 1620 0	0.489		0.198	mg/Kg		01/18/23 16:20	01/19/23 18:39	10
Acylene 2.7.3 0.386 mg/kg 01/18/23 16.20 01/19/23 18.33 4 Acylene 9.82 0.198 mg/kg 01/18/23 16.20 01/19/23 18.33 4 Acylene 9.82 0.198 mg/kg 01/18/23 16.20 01/19/23 18.39 1 hurrogate Meteovery Qualifier Limits Prepared Analyzed Dif -Bormolinozbenzene (Surr) 150 51* 70.130 01/18/23 16.20 01/19/23 18.39 1 Additorbenzene (Surr) 156 70.130 01/18/23 16.20 01/19/23 18.39 1 Adethod: TAL SOP Total BTEX - Total BTEX Calculation mg/kg 01/18/23 16.20 01/19/23 18.39 1 Adethod: SW346 8015 MI - Diesel Range Organics (DRO) (GC) mg/kg 01/18/23 10.15 01/27/23 28.37 01/18/23 16.21 01/27/23 28.37 01/18/23 10.15 01/27/23 28.37 01/18/23 10.15 01/27/23 28.37 01/18/23 10.15 01/27/23 28.37 01/18/23 10.15 01/27/23 28.37 01/18/23 10.15 01/27/23 28.37 01/18/23 10.15 01/27/23 28.37 01/2	14.8		0.198	mg/Kg		01/18/23 16:20	01/19/23 18:39	10
Lixylene 9.32 0.198 mg/kg 0/118221 16.20 0/119221 83.39 1 kurrogate 37.1 0.396 mg/kg 0/11823 16.20 0/11923 18.39 1 kurrogate 37.1 0.396 mg/kg 0/11823 16.20 0/11923 18.39 1 kurrogate 36 Si + 70 - 130 0/11823 16.20 0/11923 18.39 1 skurrogate Sirie 70 - 130 0/11823 16.20 0/11923 18.39 1 skurrogate Sirie 70 - 130 0/11823 16.20 0/11923 18.39 1 skurrogate Result Qualifier RL Unit D Prepared Analyzed DII F skut Result Qualifier RL Unit D Prepared Analyzed DII F skutinge Organics CPRO) GCO mg/kg 0/11823 10.15 0/12723 23.37 skutinge Organics CPRO) GCO mg/kg 0/11823 10.15 0/12723 23.37 skutinge Organics (Over C28-C36) <250	19.2		0.198	mg/Kg		01/18/23 16:20	01/19/23 18:39	10
bylene 9.82 0.198 mg/kg 01/18/23 18/20 01/19/23 18/39 1 hurrogate 37.1 0.396 mg/kg 01/19/23 18/20 01/19/23 18/39 1 hurrogate 37.0 57.4 70.130 01/18/23 18/20 01/19/23 18/39 1 i-Ab/bucobenzene (Surr) 150 57.4 70.130 01/18/23 18/20 01/19/23 18/39 1 i-Ab/bucobenzene (Surr) 166 70.130 01/18/23 18/20 01/18/23 18/39 1 i-Ab/bucobenzene (Surr) 166 70.130 01/18/23 18/30 1 0 i-Ablucobenzene (Surr) 166 70.130 01/18/23 18/30 01/18/23 18/39 1 i-Ablucobenzene (Surr) Result Qualifier RL Unit D Prepared Analyzed DIF i-Ablucobenzene (Surr) Result Qualifier RL Unit D Prepared Analyzed DIF i-Ablucobenzene Organics Result Qualifier RL Unit D Prepared Analyzed DIF	27.3		0.396	mg/Kg		01/18/23 16:20	01/19/23 18:39	10
typenes, Total 37.1 0.396 mg/kg 01/18/23 16:20 01/19/23 18:39 1 Lamonducrobenzene (Surr) 150 51+ 70,130 01/18/23 16:20 01/19/23 18:39 1 Lamonducrobenzene (Surr) 150 51+ 70,130 01/18/23 16:20 01/19/23 18:39 1 Adethod: TAL SOP Total BTEX - Total BTEX Calculation Result Qualifier RL Unit D Prepared Analyzed DI IF Visital BTEX 71.6 0.396 mg/kg D Prepared Analyzed DI IF Visital BTEX 71.6 0.396 mg/kg D Prepared Analyzed DI IF Visital BTEX 71.6 0.396 mg/kg D Prepared Analyzed DI IF Visital BTEX 71.6 0.396 RL Unit D Prepared Analyzed DI IF Visital BTEX Resuit Qualifier RL Unit D Prepared Analyzed DI IF Visital Colar Resuit Qualifier	9.82		0.198	mg/Kg		01/18/23 16:20	01/19/23 18:39	10
Laronofluorobenzene (Surr) 150 S1+ 70.130 01/19/23 16:20 01/19/23 16:39 1 44-Diffuodestrane (Surr) 106 70.130 01/19/23 16:30 01/19/23 16:39 1 44-Diffuodestrane (Surr) 106 70.130 01/19/23 16:30 01/19/23 16:39 1 Method: TAL. SOP Total BTEX Total BTEX 71.6 0.396 mg/Kg 0 Prepared Analyzed 01/19/23 16:39 1 Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL Unit D Prepared Analyzed 01/19/23 10:15 01/19/23 10:15 01/19/23 10:15 01/19/23 10:15 01/19/23 10:15 01/19/23 10:15 01/19/23 10:15 01/19/23 10:15 01/19/23 10:15 01/19/23 23:37 Dif F VinCo28) 250 mg/Kg 01/19/23 10:15 01/19/23 10:15 01/19/23 10:15 01/19/23 23:37 Dif F VinCo28) 250 ug/Kg 01/19/23 10:15 01/19/23 23:37 Dif F VinCo28) 250 mg/Kg 01/19/23 10:15 01/17/23 23:37 Dif F <td>37.1</td> <td></td> <td>0.396</td> <td>mg/Kg</td> <td></td> <td>01/18/23 16:20</td> <td>01/19/23 18:39</td> <td>10</td>	37.1		0.396	mg/Kg		01/18/23 16:20	01/19/23 18:39	10
14-Diffuorobenzene (Surr) 106 70.130 01/18/23 16:20 01/18/23 16:20 01/18/23 16:30 1 Method: TAL SOP Total BTEX - Total BTEX Calculation manyte Result Qualifier RL Unit D Prepared Analyzed DIF Of 120/23 13:32 71.6 0.396 mg/Kg D Prepared Analyzed DIF Of 120/23 13:32 71.6 0.396 mg/Kg D Prepared Analyzed DIF Of 120/23 13:32 01/16/23 16:20 01/16/23 16:20 DIF Of 120/23 13:32 DIF Of 120/23 10:15 01/16/23 10:15 01/20/23 10:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:15 01/20/23 30:37 01/18/23 10:15 01/20/23 30:37 01/18/23 10:15 01/27/23 23:37 01/18/23 10:15 01/27/23 23:37 01/27/23 23:37 01/18/23 10:15 01/27/23 23:37 01/27/23 23:37 01/18/23 10:15 01/27/23 23:37 01/18/23 10:15 01/27/23 23:37 01/18/23 10:15 01/27/23 23:37 01/18/23 10:15 01/27/23 23:37 01/18/23 10:15 <t< td=""><td>%Recovery</td><td>Qualifier</td><td>Limits</td><td></td><td></td><td>Prepared</td><td>Analyzed</td><td>Dil Fa</td></t<>	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Alethod: TAL. SOP Total BTEX - Total BTEX Calculation Inalyte Result Qualifier RL Unit D Prepared Analyzed DII F Gala BTEX 71.6 0.396 mg/Kg D Prepared Analyzed DII F Gala BTEX 71.6 0.396 mg/Kg D Prepared Analyzed DII F Gala TPH 6020 250 mg/Kg D Prepared Analyzed DII F Gala TPH 6020 250 mg/Kg 01/18/23 10:15 01/20/23 23:37 O Adethod: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Name Markg 01/18/23 10:15 01/27/23 23:37 O O 11/27/23 23:37 O <td></td> <td>S1+</td> <td>70 - 130</td> <td></td> <td></td> <td>01/18/23 16:20</td> <td>01/19/23 18:39</td> <td>10</td>		S1+	70 - 130			01/18/23 16:20	01/19/23 18:39	10
Nailyte Result Otal BTEX Qualifier T1.6 RL 0.396 Unit mg/Kg D Prepared Prepared Analyzed 01/20/23 18.52 Dil F dethod: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Imalyte Result 001/30/23 10.22 Unit D Prepared Analyzed 01/30/23 10.22 Dil F dethod: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Imalyte Result 01/30/23 10.22 Unit D Prepared Analyzed 01/30/23 10.22 Dil F asoline Range Organics GRO)-GC-10 Result 040/27/23 23.37 Qualifier RL Unit D Prepared Analyzed 01/30/23 10.22 Dil F Basoline Range Organics GRO)-GC-10 Result 040/27/23 23.37 Qualifier Limits Dif F Analyzed 01/18/23 10.15 01/27/23 23.37 Surrogate %/Recovery 040/18/23 10.15 Qualifier Limits Prepared 01/18/23 10.15 01/27/23 23.37 Dif F Chinocotane 99 Qualifier Result 01/18/23 10.15 01/27/23 23.37 Dif F Chinocotane 99 Qualifier Result 01/18/23 10.15 01/18/23 10.15 01/27/23 2	106		70 - 130			01/18/23 16:20	01/19/23 18:39	10
Optimistry 71.6 0.396 mglKg 01/20/23 13.52 Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Unit D Prepared Analyzed DII F otal TPH 6020 250 mglKg D Prepared Analyzed DII F alethod: SW846 8015B NM - Diesel Range Organics (DRO) (GC) unit D Prepared Analyzed DII F alesolina Range Organics Result Qualifier RL Unit D Prepared Analyzed DII F assolina Range Organics (Over 3980<***1	Total BTEX Cal	culation						
Method: SWR46 8015 NM - Diesel Range Organics (DRO) (GC) Inalyte Result Qualifier RL Unit D Prepared Analyzed DII F fotal TPH 6020 250 mg/kg D Prepared Analyzed DII F Section SW846 8015B NM - Diesel Range Organics (DRO) (GC) Numit D Prepared Analyzed DII F Section Range Organics (Over 3980 ***1 250 mg/kg 01/18/23 10:15 01/27/23 23:37 Oli Coccal 01/02/23 23:37 01/18/23 10:15 01/27/23 23:37 01/17/23 23:37 Oli Coccal 9 70 : 130 mg/kg 01/18/23 10:15 01/27/23 23:37 Storogate 5/Recovery Qualifier Limits Prepared Analyzed DII F -Chicrocotane 9 70 : 130 01/18/23 10:15 01/27/23 23:37 DII F Alethod: MCAWW 300.0 - Anions, Ion Chromatography - Soluble Nalyzed 01/19/23 10:15 01/27/23 23:37 Alethod: S02 5.03 mg/kg D <td< td=""><td>Result</td><td>Qualifier</td><td>RL</td><td>Unit</td><td>D</td><td>Prepared</td><td>Analyzed</td><td>Dil Fa</td></td<>	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Natyte Result Qualifier RL Unit D Prepared Analyzed Dil F Graf TPH 6020 250 mg/Kg 01/30/23 10.22 Dil F dethod: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL Unit D Prepared Analyzed Dil F Section Range Organics (Over 3980 *+ *1 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 Dil F Oldesel Range Organics (Over C28-C36) <250	71.6		0.396	mg/Kg			01/20/23 13:52	
Otal TPH 6020 250 mg/Kg 01/30/23 10:22 Method: SW846 8015B NM - Diesel Range Organics (SR0)-C6-C10 Result Qualifier RL Unit D Prepared Analyzed Dil F GR0)-C6-C10 Result Qualifier RL Unit D Prepared O1/30/23 23:37 Dil F Off0-C6-C10 Rog Crganics (Over 3980 *+*1 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 Dil F Off0-C6-C10 IRange Organics (Over C28-C36) <250	el Range Organ	ics (DRO) (GC)					
Method: SVR Org Method: SVR46 8015B NM - Diesel Range Organics (DRO) (GC) nanyte Numité Result Qualifier RL Unit D Prepared Analyzed DI F Basoline Range Organics 2040 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 DI F Basoline Range Organics (Over 3980 *+ *1 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 210-C28) 01 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 Surrogate 5/6ecovery Qualifier Limits Prepared Analyzed DI F -Chiorooctane 99 70 - 130 01/18/23 10:15 01/27/23 23:37 DI F -Terphenyl 101 70 - 130 01/18/23 10:15 01/27/23 23:37 DI F Natyte Result Qualifier RL Unit D Prepared Analyzed DI F Chiorooctane 99 70 - 130 01/18/23 10:15 01/27/23 23:37 DI F Alethod: MCAWW 300.0 - Anions, Ion	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Instruct Result Qualifier RL Unit D Prepared Analyzed Dil F Sasoline Range Organics 2040 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 01/27/23 23:37 Result GRO; C6-C10 3980 *+ *1 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 01/27/23 23:37 Vito: C28 (Dil Range Organics (Over C28-C36) <250	6020		250	mg/Kg			01/30/23 10:22	
Basicine Range Organics GR0,C6-C10 Dilesel Range Organics (Over 2040 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 Dilesel Range Organics (Over 3980 *+ *1 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 Dilesel Range Organics (Over C28-C36) <250	sel Range Orga	nics (DRO)	(GC)					
GRO-C6-C10 Diff	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
liesel Range Organics (Over 3980 ***1 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 10-C28) III Range Organics (Over C28-C36) <250	2040		250	mg/Kg		01/18/23 10:15	01/27/23 23:37	
Dill Range Organics (Over C28-C36) <250 U 250 mg/Kg 01/18/23 10:15 01/27/23 23:37 Nurrogate %Recovery Chlorooctane Qualifier 99 Limits 70 - 130 Prepared 01/18/23 10:15 Analyzed 01/27/23 23:37 Dil F Aethod: MCAWW 300.0 - Anions, Ion Chromatography - Soluble malyte Result Qualifier RL malyte Unit D Prepared 01/18/23 10:15 Analyzed 01/19/23 04:28 Dil F Ient Sample ID: SS02 the Collected: 01/11/23 13:50 the Received: 01/13/23 14:13 imple Depth: 0.25' Unit D Prepared 01/18/23 16:20 Analyzed 01/19/23 19:00 Dil F Aethod: SW846 8021B - Volatile Organic Compounds (GC) unalyte Result Qualifier RL 0.201 Unit D Prepared 01/18/23 16:20 Analyzed 01/19/23 19:00 Dil F Variance Qualifier RL 0.201 Unit D Prepared 01/18/23 16:20 Analyzed 01/19/23 19:00 Dil F Iterpare Qualifier RL 0.201 Unit D Prepared 01/18/23 16:20 Analyzed 01/19/23 19:00 Dil F Iterpare Qualifier	3980	*+ *1	250	mg/Kg		01/18/23 10:15	01/27/23 23:37	
Chorooctane 99 70.130 01/18/23 10:15 01/27/23 23:37 Acthorooctane 101 70.130 01/18/23 10:15 01/27/23 23:37 Acthod: MCAWW 300.0 - Anions, Ion Chromatography - Soluble 01/18/23 10:15 01/27/23 23:37 Analyzed Result Qualifier RL Unit D Prepared Analyzed Dil F Chorooctane 8.36 5.03 mg/Kg 01/18/23 10:15 01/27/23 23:37 Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble Natrix Natrix Dil F Intervention 8.36 5.03 mg/Kg 01/18/23 10:15 01/27/23 23:37 Item Collocted: 01/11/23 13:0 Result Qualifier RL Unit D Prepared Analyzed Matrix: Sol Atte Collected: 01/11/23 13:50 Ke Result Qualifier RL Unit D Prepared Analyzed Dil F Matyle Result Qualifier RL Unit D Prepared Analyzed Dil F Servere <0.201	<250	U	250	mg/Kg		01/18/23 10:15	01/27/23 23:37	
Preprint 101 70 - 130 01/18/23 10:15 01/27/23 23:37 Alethod: MCAWW 300.0 - Anions, Ion Chromatography - Soluble malyte Result Qualifier RL Unit D Prepared Analyzed Dil F Schloride 8.36 5.03 mg/Kg D Prepared Analyzed Dil F Schloride 8.36 5.03 mg/Kg D Prepared Analyzed Dil F Schloride 8.36 5.03 mg/Kg D Prepared Analyzed Dil F Schloride 01/19/23 04:28 Lab Sample ID: 890-38444 Matrix: Sol Matrix: Sol Stee 01/13/23 14:13 Matrix: Sol Matrix: Sol Matrix: Sol Acthod: SW846 8021B - Volatile Organic Compounds (GC) mg/Kg 01/18/23 16:20 01/19/23 19:00 1 Soluene <0.201	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble nalyte Result Qualifier RL Unit D Prepared Analyzed Dil F Chloride 8.36 5.03 mg/Kg 01/19/23 04:28 Dil F Lient Sample ID: SS02 ate Collected: 01/11/23 13:50 ate Received: 01/13/23 14:13 ample Depth: 0.25' Lab Sample ID: 890-38444. Method: SW846 8021B - Volatile Organic Compounds (GC) nalyte Result Qualifier RL Unit D Prepared Analyzed Dil F Senzene <0.201	99		70 - 130			01/18/23 10:15	01/27/23 23:37	
Inalyte Result Qualifier RL Unit D Prepared Analyzed Dil F ichoride 8.36 5.03 mg/Kg D Prepared Analyzed Dil F ichoride 8.36 5.03 mg/Kg D Prepared Analyzed Dil F icent Sample ID: SS02 Lab Sample ID: 890-3844. Matrix: Sol Matrix: Sol Matrix: Sol ite Collected: 01/11/23 13:50 malyte Result Qualifier RL Matrix: Sol ite Received: 01/13/23 14:13 malyte Result Qualifier RL Unit D Prepared Analyzed Dil F inalyte Result Qualifier RL Unit D Prepared Analyzed Dil F ioluene 2.25 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 i-Xylene & p-Xylene 5.03 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 i-Xylene & fotal 6.85 0.402 mg/Kg	101		70 - 130			01/18/23 10:15	01/27/23 23:37	
Chloride 8.36 5.03 mg/Kg 01/19/23 04:28 Lient Sample ID: SS02 ate Collected: 01/11/23 13:50 ate Received: 01/13/23 14:13 ample Depth: 0.25' Lab Sample ID: 890-3844. Matrix: Sol Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Matrix D Prepared Analyzed Dil F Senzene <0.201 U 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 Solutione 2.25 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 Nylene & p-Xylene 3.22 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil F	s, Ion Chromato	ography - S	oluble					
Lient Sample ID: SS02 Lab Sample ID: 890-38444 Ate Collected: 01/11/23 13:50 Matrix: Sol Ate Received: 01/13/23 14:13 Matrix: Sol ample Depth: 0.25' Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil F Benzene <0.201	Result	Qualifier	·	Unit	D	Prepared		Dil Fa
Matrix: Sol	8.36		5.03	mg/Kg			01/19/23 04:28	
Analyze 11/13/23 14:13 Ample Depth: 0.25' Method: SW846 8021B - Volatile Organic Compounds (GC) Malyte Result Qualifier RL Unit D Prepared Analyzed Dil F Benzene <0.201						Lab Sar	nple ID: 890-	3844-
Ample Depth: 0.25' Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil F Benzene <0.201							Matri	x: Soli
Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil F Benzene <0.201								
Analyte Result Qualifier RL Unit D Prepared Analyzed Dil F Benzene <0.201								
Senzene <0.201 U 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 Foluene 2.25 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 Ethylbenzene 3.22 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 n-Xylene & p-Xylene 5.03 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 o-Xylene & p-Xylene 5.03 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 o-Xylene 1.82 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 o-Xylene 1.82 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 o-Xylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 Surrogate %Recovery Qualifier Limits Prepared <th< td=""><td>• •</td><td>•</td><td>·</td><td>Unit</td><td>п</td><td>Prepared</td><td>Analyzed</td><td>Dil F</td></th<>	• •	•	·	Unit	п	Prepared	Analyzed	Dil F
Soluene 2.25 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 ithylbenzene 3.22 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 n-Xylene & p-Xylene 5.03 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 -Xylene 1.82 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1								
3.22 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 n-Xylene & p-Xylene 5.03 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 Xylene 1.82 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 cylenes, Total %Recovery Qualifier Limits Prepared Analyzed Dil F		5						
h-Xylene & p-Xylene 5.03 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 -Xylene 1.82 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 tylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 tylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 tylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1								
-Xylene 1.82 0.201 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 ylenes, Total 6.85 0.402 mg/Kg 01/18/23 16:20 01/19/23 19:00 1 urrogate %Recovery Qualifier Limits Prepared Analyzed Dil F	J.22							
Sylenes, Total6.850.402mg/Kg01/18/23 16:2001/19/23 19:0010Surrogate%RecoveryQualifierLimitsPreparedAnalyzedDil F	E 03		0.402	ing/ing		01/10/20 10.20	01/10/20 10:00	11
surrogate %Recovery Qualifier Limits Prepared Analyzed Dil F			0.201	malka		01/18/22 16:20	01/10/23 10:00	1
	1.82							
I-Bromofluorobenzene (Surr) 107 70 - 130 01/18/23 16:20 01/19/23 19:00 1	1.82 6.85		0.402			01/18/23 16:20	01/19/23 19:00	10 10
n-Xylene & p-Xylene o-Xylene Kylenes, Total Surrogate		Result 0.489 14.8 19.2 27.3 9.82 37.1 %Recovery 106 Total BTEX Calc Result 71.6 el Range Organ Result 6020 sel Range Orga Result 2040 3980 <250	14.8 19.2 27.3 9.82 37.1 %Recovery Qualifier 150 S1+ 106 Total BTEX Calculation Result Qualifier 71.6 el Range Organics (DRO) (Result Qualifier 6020 Sel Range Organics (DRO) Result Qualifier 2040 3980 *+ *1 250 U %Recovery Qualifier 99 101 \$, Ion Chromatography - S Result Result Qualifier 8.36 9 9 101 \$, Ion Chromatography - S Result Qualifier 8.36 9	Result Qualifier RL 0.489 0.198 14.8 0.198 19.2 0.198 27.3 0.396 9.82 0.198 37.1 0.396 %Recovery Qualifier Limits 150 \$1+ 70.130 106 70.130 70.130 Total BTEX Calculation RL	Result Qualifier RL Unit 0.489 0.198 mg/Kg 14.8 0.198 mg/Kg 19.2 0.198 mg/Kg 27.3 0.396 mg/Kg 9.82 0.198 mg/Kg 37.1 0.396 mg/Kg - XRecovery Qualifier Limits 150 S1+ 70.130 Total BTEX Calculation Result Qualifier RL Unit 71.6 0.396 mg/Kg el Range Organics (DRO) (GC) Result Qualifier RL 6020 250 mg/Kg sel Range Organics (DRO) (GC) mg/Kg Sel Range Organics (DRO) (GC) mg/Kg 3980<*+*1	Result Qualifier RL Unit D 0.489 0.198 mg/Kg mg/Kg 19.2 0.198 mg/Kg 27.3 0.396 mg/Kg 37.1 0.396 mg/Kg 760 S1+ 70 - 130 706 70 - 130 mg/Kg 71.6 S1+ 70 - 130 706 70 - 130 mg/Kg 71.6 Qualifier RL 71.6 0.396 mg/Kg 90 Sel Range Organics (DRO) (GC) Unit D Result Qualifier RL Unit D 6020 250 mg/Kg C mg/Kg 3980 *+*1 250 mg/Kg C 3980 *+*1 250 mg/Kg D 3980 *+*1 250 mg/Kg D 3980 *+*1 250 mg/Kg D 3880 *+*1 250 mg/Kg D <td>Result Qualifier RL Unit D Prepared 0.489 0.198 mg/Kg 01/18/23 16:20 01/18/23 16:20 14.8 0.198 mg/Kg 01/18/23 16:20 01/18/23 16:20 27.3 0.396 mg/Kg 01/18/23 16:20 01/18/23 16:20 9.42 0.198 mg/Kg 01/18/23 16:20 01/18/23 16:20 37.1 0.396 mg/Kg 01/18/23 16:20 %Recovery Qualifier Limits Prepared 150 51+ 70.130 01/18/23 16:20 Total BTEX Calculation Result Qualifier RL Unit D Prepared 71.6 0.396 mg/Kg 0 Prepared 01/18/23 16:20 Sel Range Organics (DRO) (GC) mg/Kg 0 01/18/23 10:15 0 3980 *+*1 250 mg/Kg 01/18/23 10:15 3980 *+*1 250 mg/Kg 01/18/23 10:15 250 0 250 mg/Kg 01/18/23 10:15</td> <td>Result Qualifier RL Unit D Propared Analyzed 0.489 0.198 mg/Kg 01/18/23 16:20 01/19/23 18:39 14.8 0.198 mg/Kg 01/18/23 16:20 01/19/23 18:39 27.3 0.396 mg/Kg 01/18/23 16:20 01/19/23 18:39 9.82 0.198 mg/Kg 01/18/23 16:20 01/19/23 18:39 37.1 0.396 mg/Kg 01/18/23 16:20 01/19/23 18:39 150 S1+ 70.130 01/18/23 16:20 01/19/23 18:39 106 70.130 01/18/23 16:20 01/19/23 18:39 106 70.130 01/18/23 16:20 01/19/23 18:39 106 70.130 01/18/23 16:20 01/19/23 18:39 1016 Result Qualifier RL Unit D Prepared Analyzed 01/18/23 16:20 01/19/23 18:39 01/18/23 16:20 01/19/23 18:39 01/18/23 16:20 01/19/23 18:39 101 70.130 mg/Kg D Prepared Analyzed </td>	Result Qualifier RL Unit D Prepared 0.489 0.198 mg/Kg 01/18/23 16:20 01/18/23 16:20 14.8 0.198 mg/Kg 01/18/23 16:20 01/18/23 16:20 27.3 0.396 mg/Kg 01/18/23 16:20 01/18/23 16:20 9.42 0.198 mg/Kg 01/18/23 16:20 01/18/23 16:20 37.1 0.396 mg/Kg 01/18/23 16:20 %Recovery Qualifier Limits Prepared 150 51+ 70.130 01/18/23 16:20 Total BTEX Calculation Result Qualifier RL Unit D Prepared 71.6 0.396 mg/Kg 0 Prepared 01/18/23 16:20 Sel Range Organics (DRO) (GC) mg/Kg 0 01/18/23 10:15 0 3980 *+*1 250 mg/Kg 01/18/23 10:15 3980 *+*1 250 mg/Kg 01/18/23 10:15 250 0 250 mg/Kg 01/18/23 10:15	Result Qualifier RL Unit D Propared Analyzed 0.489 0.198 mg/Kg 01/18/23 16:20 01/19/23 18:39 14.8 0.198 mg/Kg 01/18/23 16:20 01/19/23 18:39 27.3 0.396 mg/Kg 01/18/23 16:20 01/19/23 18:39 9.82 0.198 mg/Kg 01/18/23 16:20 01/19/23 18:39 37.1 0.396 mg/Kg 01/18/23 16:20 01/19/23 18:39 150 S1+ 70.130 01/18/23 16:20 01/19/23 18:39 106 70.130 01/18/23 16:20 01/19/23 18:39 106 70.130 01/18/23 16:20 01/19/23 18:39 106 70.130 01/18/23 16:20 01/19/23 18:39 1016 Result Qualifier RL Unit D Prepared Analyzed 01/18/23 16:20 01/19/23 18:39 01/18/23 16:20 01/19/23 18:39 01/18/23 16:20 01/19/23 18:39 101 70.130 mg/Kg D Prepared Analyzed

Eurofins Carlsbad

Client Sample Results

Job ID: 890-3844-1 SDG: 03D2057068

Matrix: Solid

5

Lab Sample ID: 890-3844-2

Client Sample ID: SS02

Project/Site: SEMU Permian Battery

Date Collected: 01/11/23 13:50

Client: Ensolum

Date Received: 01/13/23 14:13 Sample Depth: 0.25'

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130			01/18/23 16:20	01/19/23 19:00	100
Method: TAL SOP Total BTEX - T	otal BTEX Calo	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	12.3		0.402	mg/Kg			01/20/23 13:52	1
Method: SW846 8015 NM - Diese	Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1050		250	mg/Kg			01/30/23 10:22	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250	mg/Kg		01/18/23 10:15	01/27/23 23:59	5
Diesel Range Organics (Over C10-C28)	1050	*+ *1	250	mg/Kg		01/18/23 10:15	01/27/23 23:59	Ę
Oll Range Organics (Over C28-C36)	<250	U	250	mg/Kg		01/18/23 10:15	01/27/23 23:59	Ę
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	77		70 - 130			01/18/23 10:15	01/27/23 23:59	Ę
p-Terphenyl	92		70 - 130			01/18/23 10:15	01/27/23 23:59	ŧ
Method: MCAWW 300.0 - Anions	Ion Chromato	ography - So	bluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.7		5.00	mg/Kg			01/19/23 04:46	

Date Collected: 01/11/23 13:55 Date Received: 01/13/23 14:13 Sample Depth: 0.25'

Matrix: Solid

Dil Fac

Analyzed

	•					
Sample Depth: 0.25'						
Method: SW846 8021B - Vo	latile Organic Comp	ounds (GC)				
Analyte		Qualifier	RL	Unit	D	Prepared
Benzene	0.359		0.201	mg/Kg		01/19/23 13:1

-						-	
Benzene	0.359		0.201	mg/Kg	01/19/23 13:17	01/21/23 19:47	100
Toluene	6.85		0.201	mg/Kg	01/19/23 13:17	01/21/23 19:47	100
Ethylbenzene	8.23		0.201	mg/Kg	01/19/23 13:17	01/21/23 19:47	100
m-Xylene & p-Xylene	14.5		0.402	mg/Kg	01/19/23 13:17	01/21/23 19:47	100
o-Xylene	5.29		0.201	mg/Kg	01/19/23 13:17	01/21/23 19:47	100
Xylenes, Total	19.8		0.402	mg/Kg	01/19/23 13:17	01/21/23 19:47	100
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130		01/19/23 13:17	01/21/23 19:47	100
1,4-Difluorobenzene (Surr)	92		70 - 130		01/19/23 13:17	01/21/23 19:47	100

Method: TAL SOP Total BTEX	- Total BTEX Cal	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	35.2		0.402	mg/Kg			01/23/23 12:52	1
Method: SW846 8015 NM - Di	esel Range Organ	ics (DRO) (G	C)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3040		250	mg/Kg			01/30/23 10:22	1

Eurofins Carlsbad

Client Sample Results

Job ID: 890-3844-1 SDG: 03D2057068

Matrix: Solid

5

Lab Sample ID: 890-3844-3

Client Sample ID: SS03

Project/Site: SEMU Permian Battery

Date Collected: 01/11/23 13:55 Date Received: 01/13/23 14:13

Sample Depth: 0.25'

Client: Ensolum

Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1220		250	mg/Kg		01/18/23 10:15	01/28/23 00:21	5
1820	*+ *1	250	mg/Kg		01/18/23 10:15	01/28/23 00:21	5
<250	U	250	mg/Kg		01/18/23 10:15	01/28/23 00:21	5
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
83		70 - 130			01/18/23 10:15	01/28/23 00:21	5
91		70 - 130			01/18/23 10:15	01/28/23 00:21	5
	1820 <250 <u>%Recovery</u> 83	1820 *+ *1 <250	1820 *+ *1 250 <250	1820 *+ *1 250 mg/Kg <250	1820 *+ *1 250 mg/Kg <250	1820 *+ *1 250 mg/Kg 01/18/23 10:15 <250	1820 *+ *1 250 mg/Kg 01/18/23 10:15 01/28/23 00:21 <250

Analyte	Result	Quanner		onit	 Trepared	Analyzea	Dirruc
Chloride	<4.97	U	4.97	mg/Kg		01/19/23 04:52	1

Eurofins Carlsbad

Client: Ensolum Project/Site: SEMU Permian Battery

Method: 8021B - Volatile Organic Compounds (GC) Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
880-23720-A-61-G MS	Matrix Spike	98	113		
880-23720-A-61-H MSD	Matrix Spike Duplicate	101	112		
880-23861-A-1-A MS	Matrix Spike	113	87		- 22
880-23861-A-1-B MSD	Matrix Spike Duplicate	93	103		
890-3844-1	SS01	150 S1+	106		
890-3844-2	SS02	107	98		
890-3844-3	SS03	83	92		
LCS 880-44290/1-A	Lab Control Sample	89	98		
LCS 880-44342/1-A	Lab Control Sample	96	114		
LCSD 880-44290/2-A	Lab Control Sample Dup	93	102		
LCSD 880-44342/2-A	Lab Control Sample Dup	96	115		
MB 880-44290/5-A	Method Blank	88	97		
MB 880-44340/5-A	Method Blank	97	112		
MB 880-44342/5-A	Method Blank	95	111		
0					
Surrogate Legend					
BFB = 4-Bromofluoroben					
DFBZ = 1,4-Difluorobenz	ene (Surr)				

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

Percent Surrogate Recovery (Acceptance Limits) 1CO1 OTPH1 (70-130) (70-130) Lab Sample ID **Client Sample ID** 890-3844-1 SS01 99 101 890-3844-2 SS02 77 92 890-3844-3 SS03 91 83 53 S1-890-3848-A-1-C MS Matrix Spike 56 S1-890-3848-A-1-D MSD Matrix Spike Duplicate 57 S1-50 S1-LCS 880-44231/2-A Lab Control Sample 141 S1+ 154 S1+ LCSD 880-44231/3-A Lab Control Sample Dup 136 S1+ 135 S1+ Method Blank MB 880-44231/1-A 171 S1+ 166 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-3844-1 SDG: 03D2057068

Prep Type: Total/NA

Prep Type: Total/NA

Client: Ensolum

Ē.

QC Sample Results

Job ID: 890-3844-1 SDG: 03D2057068

Project/Site: SEMU Permian Battery

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-442 Matrix: Solid										mple ID: M Prep Ty		
Analysis Batch: 44311										Prep B		
Analysis Datch. 44511	N	в мв								Fieh D	atcii.	4423
Analyte		It Qualifier	RL		Unit		D	Pre	pared	Analyzec		Dil Fa
Benzene	<0.0020		0.00200		mg/K	а			23 16:20	01/19/23 11		
Toluene	<0.002		0.00200		mg/K	-			23 16:20	01/19/23 11		
Ethylbenzene	<0.002		0.00200		mg/K	-			23 16:20	01/19/23 11		
m-Xylene & p-Xylene	<0.002		0.00200		mg/K				23 16:20	01/19/23 11		
o-Xylene	<0.0040		0.00400		-	-			23 16:20	01/19/23 11		
•					mg/K	-						
Xylenes, Total	<0.0040	0 0	0.00400		mg/K	g	(01/18/	23 16:20	01/19/23 11	20	
	N	IB MB										
Surrogate	%Recove	ry Qualifier	Limits					Pre	epared	Analyzed		Dil Fa
4-Bromofluorobenzene (Surr)		38	70 - 130				(01/18/	/23 16:20	01/19/23 11	20	
1,4-Difluorobenzene (Surr)	:	97	70 - 130				(01/18/	/23 16:20	01/19/23 11	20	
Lab Sample ID: LCS 880-44	290/1-A						Cli	ent S	Sample I	D: Lab Con		
Matrix: Solid										Prep Ty	be: To	otal/N
Analysis Batch: 44311										Prep B	atch:	4429
			Spike	LCS	LCS					%Rec		
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits		
Benzene			0.100	0.1090		mg/Kg			109	70 - 130		
Toluene			0.100	0.1012		mg/Kg			101	70 - 130		
Ethylbenzene			0.100	0.1080		mg/Kg			108	70 - 130		
			0.200	0.1965		mg/Kg			98	70 - 130		
m-Xylene & p-Xylene												
			0.100	0.09984		mg/Kg			100	70 - 130		
m-Xylene & p-Xylene o-Xylene				0.09984		mg/Kg			100	70 - 130		
	LCS L	cs		0.09984		mg/Kg			100	70 - 130		
		CS ualifier		0.09984		mg/Kg			100	70 - 130		
o-Xylene Surrogate			0.100	0.09984		mg/Kg			100	70 - 130		
o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	%Recovery Q		0.100 <i>Limits</i>	0.09984		mg/Kg			100	70 - 130		
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	%Recovery Q 89 98		0.100 Limits 70 - 130	0.09984								
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4	%Recovery Q 89 98		0.100 Limits 70 - 130	0.09984			ient S	Samp		ab Control S		
o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	%Recovery Q 89 98		0.100 Limits 70 - 130	0.09984			ient S	Samp				
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid	%Recovery Q 89 98		0.100 Limits 70 - 130	0.09984			ient S	Samp		ab Control S	be: To	otal/N
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid	%Recovery Q 89 98		0.100 Limits 70 - 130		LCSD		ient S	Samp		ab Control : Prep Ty	be: To	otal/N 4429
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4	%Recovery Q 89 98		0.100 <i>Limits</i> 70 - 130 70 - 130	LCSD	LCSD Qualifier		ient S	-		ab Control S Prep Ty Prep E	be: To	otal/N 4429 RF
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte	%Recovery Q 89 98		0.100 Limits 70 - 130 70 - 130 Spike	LCSD		CI	ient S	-	ole ID: La	ab Control S Prep Ty Prep E %Rec	be: To atch:	tal/N 4429 RI Lir
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene	%Recovery Q 89 98		0.100 Limits 70 - 130 70 - 130 Spike Added	LCSD Result		CI	ient S	-	ble ID: La	ab Control S Prep Ty Prep E %Rec Limits	oe: To atch: RPD	otal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311	%Recovery Q 89 98		0.100 Limits 70 - 130 70 - 130 Spike Added 0.100	LCSD Result 0.1103		CI Unit mg/Kg	ient S	-	<mark>%Rec</mark>	ab Control S Prep Ty Prep E %Rec Limits 70 - 130	oe: To atch: RPD 1	tal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene	%Recovery Q 89 98		0.100 Limits 70 - 130 70 - 130 Spike Added 0.100 0.100	LCSD Result 0.1103 0.1026		CI mg/Kg mg/Kg	ient S	-	ble ID: La <u>%Rec</u> 110 103	Ab Control S Prep Ty Prep E %Rec Limits 70 - 130 70 - 130	e: To atch: RPD 1 1	otal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene	%Recovery Q 89 98		0.100 Limits 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100	LCSD Result 0.1103 0.1026 0.1118		CI mg/Kg mg/Kg mg/Kg	ient S	-	%Rec 110 103 112	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130	RPD 1 3	otal/N 4429 RF Lim
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	<u>%Recovery</u> <u>9</u> 89 98 44290/2-A	ualifier _	0.100 Limits 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200	LCSD Result 0.1103 0.1026 0.1118 0.2046		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	-	%Rec 110 103 112 102	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 3 4	otal/N 4429 RF Lim
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	%Recovery Q 89 98 44290/2-A 	ualifier -	0.100 Limits 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100	LCSD Result 0.1103 0.1026 0.1118 0.2046		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	-	%Rec 110 103 112 102	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 3 4	otal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate	%Recovery Q 89 98 44290/2-A LCSD L %Recovery Q	ualifier -	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.100 Limits	LCSD Result 0.1103 0.1026 0.1118 0.2046		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	-	%Rec 110 103 112 102	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 3 4	otal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	%Recovery Q	ualifier -	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 Limits 70 - 130	LCSD Result 0.1103 0.1026 0.1118 0.2046		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	-	%Rec 110 103 112 102	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 3 4	otal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	%Recovery Q 89 98 44290/2-A LCSD L %Recovery Q	ualifier -	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.100 Limits	LCSD Result 0.1103 0.1026 0.1118 0.2046		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	-	%Rec 110 103 112 102	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 3 4	otal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	<u>%Recovery</u> Q 89 98 44290/2-A <u>LCSD</u> L %Recovery Q 93 102	ualifier -	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 Limits 70 - 130	LCSD Result 0.1103 0.1026 0.1118 0.2046		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	<u>D</u>	%Rec 110 103 112 102 104	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 1 3 4 4	0tal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-23861-4	<u>%Recovery</u> Q 89 98 44290/2-A <u>LCSD</u> L %Recovery Q 93 102	ualifier -	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 Limits 70 - 130	LCSD Result 0.1103 0.1026 0.1118 0.2046		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	<u>D</u>	%Rec 110 103 112 102 104	ab Control S Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 1 3 4 4 4	otal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-23861-4 Matrix: Solid	<u>%Recovery</u> Q 89 98 44290/2-A <u>LCSD</u> L %Recovery Q 93 102	ualifier -	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 Limits 70 - 130	LCSD Result 0.1103 0.1026 0.1118 0.2046		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	<u>D</u>	%Rec 110 103 112 102 104	ab Control S Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 1 3 4 4 4 Aatrix De: To	otal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	<u>%Recovery</u> <u>89</u> <u>98</u> 44290/2-A <u>LCSD</u> <u>LCSD</u> <u>44290/2-A</u> <u>102</u> A-1-A MS	ualifier -	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 Uimits 70 - 130 70 - 130	LCSD Result 0.1103 0.1026 0.1118 0.2046 0.1041	Qualifier	CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	<u>D</u>	%Rec 110 103 112 102 104	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 1 3 4 4 4 Aatrix De: To	stal/N 4429 RF Lin C C C S Spik
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-23861-4 Matrix: Solid	<u>%Recovery</u> Q 89 98 44290/2-A <u>LCSD</u> L %Recovery Q 93 102	ualifier -	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 Limits 70 - 130	LCSD Result 0.1103 0.1026 0.1118 0.2046 0.1041		CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	<u>D</u>	%Rec 110 103 112 102 104	ab Control S Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 1 3 4 4 4 Aatrix De: To	stal/N 4429 RF Lin
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-23861-4 Matrix: Solid	<u>%Recovery</u> <u>89</u> <u>98</u> 44290/2-A <u>LCSD</u> <u>LCSD</u> <u>44290/2-A</u> <u>102</u> A-1-A MS	ualifier	0.100 Limits 70 - 130 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 Uimits 70 - 130 70 - 130	LCSD Result 0.1103 0.1026 0.1118 0.2046 0.1041	Qualifier	CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	<u>D</u>	%Rec 110 103 112 102 104	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	RPD 1 1 3 4 4 4 Aatrix De: To	stal/N 4429 RP Linr
o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-4 Matrix: Solid Analysis Batch: 44311 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: 880-23861-4 Matrix: Solid Analysis Batch: 44311		ualifier	0.100 Limits 70 - 130 70 - 130 Spike Added 0.100 0.100 0.100 0.200 0.100 0.200 0.100 Limits 70 - 130 70 - 130 70 - 130	LCSD Result 0.1103 0.1026 0.1118 0.2046 0.1041	Qualifier	CI mg/Kg mg/Kg mg/Kg mg/Kg	ient S	<u>D</u>	%Rec 110 103 112 102 104	ab Control 3 Prep Ty Prep E %Rec Limits 70 - 130 70 - 190 70 - 190 7	RPD 1 1 3 4 4 4 Aatrix De: To	stal/N 4429 RF Lin C C C S Spik

MS MS

Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

Result

0.1254

0.2249

0.1122

Spike

Added

0.100

0.200

0.100

Limits 70 - 130

70 - 130

Client: Ensolum Project/Site: SEMU Permian Battery

Lab Sample ID: 880-23861-A-1-A MS

Matrix: Solid

Analyte

o-Xylene

Surrogate

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 44311

Sample Sample

U

U

MS MS

Qualifier

Qualifier

Result

<0.00201

< 0.00402

%Recovery

<0.00201 U

113

87

Job ID: 890-3844-1 SDG: 03D2057068

Prep Type: Total/NA

Prep Batch: 44290

Client Sample ID: Matrix Spike

%Rec

Limits

70 - 130

70 - 130

70 - 130

%Rec

125

111

110

D

7

le ID: Matrix Spike Duplicate	
Prep Type: Total/NA	

Client Sample ID: Method Blank

Analyzed

01/21/23 00:19

01/21/23 00:19

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 44340

Prep Batch: 44290

Client Samp

Matrix: Solid Analysis Batch: 44311

Lab Sample ID: 880-23861-A-1-B MSD

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

	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	0.09766		mg/Kg		99	70 - 130	31	35	
Toluene	<0.00201	U	0.0990	0.08982		mg/Kg		91	70 - 130	2	35	ī
Ethylbenzene	<0.00201	U	0.0990	0.09844		mg/Kg		99	70 - 130	24	35	
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1823		mg/Kg		91	70 - 130	21	35	Ē
o-Xylene	<0.00201	U	0.0990	0.09234		mg/Kg		92	70 - 130	19	35	
	M6D	MOD										
	MSD	MSD										

	WSD	WSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-44340/5-A Matrix: Solid Analysis Batch: 44418

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/23 13:13	01/21/23 00:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/23 13:13	01/21/23 00:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/23 13:13	01/21/23 00:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/23 13:13	01/21/23 00:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/23 13:13	01/21/23 00:19	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/23 13:13	01/21/23 00:19	1
	МВ	МВ						
	IVID	IVID						

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: MB 880-44342/5-A Matrix: Solid Analysis Batch: 44418

МВ МВ Result Qualifier Dil Fac Analyte Unit D Prepared RL Analyzed Benzene <0.00200 U 0.00200 01/19/23 13:17 01/21/23 11:57 mg/Kg 1 Toluene <0.00200 U 0.00200 mg/Kg 01/19/23 13:17 01/21/23 11:57 1 Ethylbenzene <0.00200 U 0.00200 mg/Kg 01/19/23 13:17 01/21/23 11:57 1 01/19/23 13:17 01/21/23 11:57 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 1

Eurofins Carlsbad

Prep Type: Total/NA

Prep Batch: 44342

Prepared

01/19/23 13:13

01/19/23 13:13

Dil Fac

1

1

Lab Sample ID: MB 880-44342/5-4	4							Client Sa	ample ID: Metho	od Blank
Matrix: Solid									Prep Type:	Total/NA
Analysis Batch: 44418									Prep Batc	h: 44342
	MB	MB								
Analyte	Result	Qualifier	RL		Unit		D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/K	g		01/19/23 13:17	01/21/23 11:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/K	g		01/19/23 13:17	01/21/23 11:57	1
	МВ	МВ								
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				-	01/19/23 13:17	01/21/23 11:57	1
1,4-Difluorobenzene (Surr)	111		70 - 130					01/19/23 13:17	01/21/23 11:57	1
Matrix: Solid Analysis Batch: 44418			Spike	LCS	LCS				Prep Type: Prep Batc %Rec	
Analyte			Added	Result	Qualifier	Unit		D %Rec	Limits	
· ···· ·										
Benzene			0.100	0.09578		mg/Kg		96	70 - 130	
			0.100	0.09578 0.08907		mg/Kg mg/Kg		96 89		
Benzene									70 - 130	
Toluene			0.100	0.08907		mg/Kg		89	70 ₋ 130 70 ₋ 130	
Benzene Toluene Ethylbenzene			0.100 0.100	0.08907 0.08538		mg/Kg mg/Kg		89 85	70 - 130 70 - 130 70 - 130	
Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	LCS LCS	3	0.100 0.100 0.200	0.08907 0.08538 0.1726		mg/Kg mg/Kg mg/Kg		89 85 86	70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	
Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	LCS LCS %Recovery Qua		0.100 0.100 0.200	0.08907 0.08538 0.1726		mg/Kg mg/Kg mg/Kg		89 85 86	70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	
Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene			0.100 0.100 0.200 0.100	0.08907 0.08538 0.1726		mg/Kg mg/Kg mg/Kg		89 85 86	70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	

Lab Sample ID: LCSD 880-44342/2-A Matrix: Solid

Analysis Batch: 44418

Prep Batch: 44342 LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 0.100 0.09760 98 35 Benzene mg/Kg 70 - 130 2 70 - 130 Toluene 0.100 0.09010 mg/Kg 90 1 35 70 - 130 Ethylbenzene 0.100 0.08582 mg/Kg 86 35 1 70 - 130 m-Xylene & p-Xylene 0.200 0.1730 mg/Kg 86 0 35 o-Xylene 0.100 0.08489 mg/Kg 85 70 - 130 35 1

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: 880-23720-A-61-G MS Matrix: Solid

Analysis Batch: 44418									Prep I	Batch: 44342
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F2 F1	0.0996	0.06497	F1	mg/Kg		65	70 - 130	
Toluene	<0.00202	U F2 F1	0.0996	0.06294	F1	mg/Kg		63	70 - 130	
Ethylbenzene	<0.00202	U F2 F1	0.0996	0.06079	F1	mg/Kg		61	70 - 130	
m-Xylene & p-Xylene	<0.00404	U F2 F1	0.199	0.1231	F1	mg/Kg		62	70 _ 130	
o-Xylene	<0.00202	U F2 F1	0.0996	0.06114	F1	mg/Kg		61	70 - 130	

Eurofins Carlsbad

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Client: Ensolum Project/Site: SEMU Permian Battery

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

Lab Sample ID: 880-23720-A-61-G MS Matrix: Solid

Analysis Batch: 44418

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 _ 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 880-23720-A-61-H MSD Matrix: Solid

Analysis Batch: 44418

Analysis Batch: 44418									Prep	Batch:	44342
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	< 0.00202	U F2 F1	0.0990	0.02872	F2 F1	mg/Kg		29	70 - 130	77	35
Toluene	< 0.00202	U F2 F1	0.0990	0.02996	F2 F1	mg/Kg		30	70 - 130	71	35
Ethylbenzene	< 0.00202	U F2 F1	0.0990	0.03097	F2 F1	mg/Kg		31	70 - 130	65	35
m-Xylene & p-Xylene	<0.00404	U F2 F1	0.198	0.06516	F2 F1	mg/Kg		33	70 - 130	62	35
o-Xylene	<0.00202	U F2 F1	0.0990	0.03524	F2 F1	mg/Kg		36	70 - 130	54	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	101		70 - 130								
1,4-Difluorobenzene (Surr)	112		70 - 130								

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

_ Lab Sample ID: MB 880-44231/1-A								Client Sa	ample ID: Metho	od Blank
Matrix: Solid								onem of	Prep Type:	Total/NA
Analysis Batch: 44896	мв	мв							Prep Batc	n: 44231
Analyte		Qualifier	RL		Unit		D P	repared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg	9	01/1	8/23 10:15	01/27/23 11:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg	9	01/1	8/23 10:15	01/27/23 11:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg	9	01/1	8/23 10:15	01/27/23 11:09	1
	МВ	МВ								
Surrogate	%Recovery	Qualifier	Limits				P	repared	Analyzed	Dil Fac
1-Chlorooctane	171	S1+	70 - 130				01/1	8/23 10:15	01/27/23 11:09	1
o-Terphenyl	166	S1+	70 - 130				01/1	8/23 10:15	01/27/23 11:09	1
Lab Sample ID: LCS 880-44231/2-A Matrix: Solid Analysis Batch: 44896							Client	t Sample	ID: Lab Control Prep Type: Prep Batc	Total/NA
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10			1000	771.5		mg/Kg		77	70 - 130	
Diesel Range Organics (Over			1000	1180						

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	141	S1+	70 - 130
o-Terphenyl	154	S1+	70 - 130

Prep Type: Total/NA

Client Sample ID: Matrix Spike Prep Type: Total/NA Prep Batch: 44342

Client Sample ID: Matrix Spike Duplicate

C10-C28)

Job ID: 890-3844-1 SDG: 03D2057068

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

ab Sample ID: LCSD 880-4	4231/3-A					Clier	nt Sam	n <mark>ple ID:</mark>	Lab Contro		
latrix: Solid									Prep 1	Type: Tot	tal/NA
nalysis Batch: 44896									Prep	Batch:	4423 ⁻
			Spike	LCSD	LCSD				%Rec		RPD
nalyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
asoline Range Organics			1000	877.8		mg/Kg		88	70 - 130	13	2
GRO)-C6-C10											
iesel Range Organics (Over			1000	1489	*+ *1	mg/Kg		149	70 - 130	23	2
10-C28)											
	LCSD	LCSD									
urrogate	%Recovery	Qualifier	Limits								
Chlorooctane		S1+	70 - 130								
Terphenyl	135	S1+	70 - 130								
ab Sample ID: 890-3848-A-	-1-C MS							Client	Sample ID	: Matrix	Spik
latrix: Solid									Prep 1	Type: Tot	tal/N/
nalysis Batch: 44896										Batch:	
-	Sample	Sample	Spike	MS	MS				%Rec		
nalyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
asoline Range Organics	<49.9	U F1 F2	998	1074		mg/Kg		104	70 - 130		
GRO)-C6-C10						0 0					
iesel Range Organics (Over	<49.9	U *+ *1	998	831.0		mg/Kg		83	70 - 130		
10-C28)											
	MS	MS									
urrogate	%Recovery	Qualifier	Limits								
Chlorooctane	56	S1-	70 - 130								
Terphenyl		S1-	70 - 130								
		-									
ab Sample ID: 890-3848-A-	1-D MSD					Cli	ient Sa	ample IC	: Matrix Sp	oike Dup	licat
latrix: Solid								· ·		· Type: Tot	
nalysis Batch: 44896										Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec		RP
nalyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Lim
asoline Range Organics	<49.9	U F1 F2	997	512.0	F1 F2	mg/Kg		48	70 - 130	71	2
GRO)-C6-C10											
iesel Range Organics (Over	<49.9	U *+ *1	997	792.2		mg/Kg		79	70 - 130	5	2
10-C28)											
	MSD	MSD									
urrogate	%Recovery		Limits								
			70 - 130								
Chlorooctane	57	S1-									

Lab Sample ID: MB 880-44195/1-A Matrix: Solid						Client Sa	ample ID: Metho Prep Type:	
Analysis Batch: 44277								
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/19/23 04:09	1

Eurofins Carlsbad

Project/Site: SEMU Permian Battery

Client: Ensolum

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-44195 Matrix: Solid	5/2-A						Client	Sample	e ID: Lab Co Prep	ontrol S Type: S	
Analysis Batch: 44277											
			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250	263.7		mg/Kg		105	90 - 110		
Lab Sample ID: LCSD 880-4419	95/3-A					Clier	nt Sam	ple ID:	Lab Contro	ol Sampl	e Dup
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 44277											
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	263.6		mg/Kg		105	90 _ 110	0	20
- Lab Sample ID: 890-3844-1 MS									Client Sa	mple ID:	SS01
Matrix: Solid										· Type: S	
Analysis Batch: 44277											
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	8.36		252	268.2		mg/Kg		103	90 _ 110		
- Lab Sample ID: 890-3844-1 MS	D								Client Sa	mple ID:	SS01
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 44277											
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	8.36		252	267.2		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Ensolum Project/Site: SEMU Permian Battery Job ID: 890-3844-1 SDG: 03D2057068

GC VOA

Prep Batch: 44290

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
390-3844-1	SS01	Total/NA	Solid	5035	
90-3844-2	SS02	Total/NA	Solid	5035	
/IB 880-44290/5-A	Method Blank	Total/NA	Solid	5035	
_CS 880-44290/1-A	Lab Control Sample	Total/NA	Solid	5035	
_CSD 880-44290/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
380-23861-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
80-23861-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 44311					
.ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
90-3844-1	SS01	Total/NA	Solid	8021B	44290
390-3844-2	SS02	Total/NA	Solid	8021B	44290
/IB 880-44290/5-A	Method Blank	Total/NA	Solid	8021B	44290
.CS 880-44290/1-A	Lab Control Sample	Total/NA	Solid	8021B	44290
CSD 880-44290/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	44290
80-23861-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	44290
80-23861-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	44290
ep Batch: 44340					/
Lab Sample ID MB 880-44340/5-A	Client Sample ID Method Blank	Prep Type Total/NA	Matrix Solid	<u>Method</u> 5035	Prep Batc
ep Batch: 44342	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
90-3844-3	SS03	Total/NA	Solid	5035	
1B 880-44342/5-A	Method Blank	Total/NA	Solid	5035	
.CS 880-44342/1-A	Lab Control Sample	Total/NA	Solid	5035	
CSD 880-44342/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
380-23720-A-61-G MS	Matrix Spike	Total/NA	Solid	5035	
80-23720-A-61-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 44418					
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
390-3844-3	SS03	Total/NA	Solid	8021B	44342
/IB 880-44340/5-A	Method Blank	Total/NA	Solid	8021B	44340
/IB 880-44342/5-A	Method Blank	Total/NA	Solid	8021B	44342
CS 880-44342/1-A	Lab Control Sample	Total/NA	Solid	8021B	44342
.CSD 880-44342/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4434
880-23720-A-61-G MS	Matrix Spike	Total/NA	Solid	8021B	44342
380-23720-A-61-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	4434
alysis Batch: 44470					
ah Samala ID	Client Sample ID	Bron Tuno	Motrix	Mothod	Bron Boto

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3844-1	SS01	Total/NA	Solid	Total BTEX	
890-3844-2	SS02	Total/NA	Solid	Total BTEX	
890-3844-3	SS03	Total/NA	Solid	Total BTEX	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum Project/Site: SEMU Permian Battery

GC Semi VOA

Prep Batch: 44231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3844-1	SS01	Total/NA	Solid	8015NM Prep	
890-3844-2	SS02	Total/NA	Solid	8015NM Prep	
890-3844-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-44231/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-44231/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-44231/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3848-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3848-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 44896

090-3040-A-1-C IVIS	Matrix Spike	Total/INA	5010	ou i binivi Prep		
890-3848-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep		8
Analysis Batch: 44896						9
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-3844-1	SS01	Total/NA	Solid	8015B NM	44231	
890-3844-2	SS02	Total/NA	Solid	8015B NM	44231	
890-3844-3	SS03	Total/NA	Solid	8015B NM	44231	14
MB 880-44231/1-A	Method Blank	Total/NA	Solid	8015B NM	44231	
LCS 880-44231/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	44231	10
LCSD 880-44231/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	44231	
890-3848-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	44231	4.9
890-3848-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	44231	13
Analysis Batch: 45008						14

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3844-1	SS01	Total/NA	Solid	8015 NM	
890-3844-2	SS02	Total/NA	Solid	8015 NM	
890-3844-3	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 44195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3844-1	SS01	Soluble	Solid	DI Leach	
890-3844-2	SS02	Soluble	Solid	DI Leach	
890-3844-3	SS03	Soluble	Solid	DI Leach	
MB 880-44195/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44195/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44195/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3844-1 MS	SS01	Soluble	Solid	DI Leach	
890-3844-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 44277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3844-1	SS01	Soluble	Solid	300.0	44195
890-3844-2	SS02	Soluble	Solid	300.0	44195
890-3844-3	SS03	Soluble	Solid	300.0	44195
MB 880-44195/1-A	Method Blank	Soluble	Solid	300.0	44195
LCS 880-44195/2-A	Lab Control Sample	Soluble	Solid	300.0	44195
LCSD 880-44195/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44195
890-3844-1 MS	SS01	Soluble	Solid	300.0	44195
890-3844-1 MSD	SS01	Soluble	Solid	300.0	44195

5

Job ID: 890-3844-1 SDG: 03D2057068

Project/Site: SEMU Permian Battery

5 6

9

Job ID: 890-3844-1 SDG: 03D2057068

Lab Sample ID: 890-3844-1 Matrix: Solid

Lab Sample ID: 890-3844-2

Lab Sample ID: 890-3844-3

Matrix: Solid

Matrix: Solid

Date Collected: 01/11/23 13:45 Date Received: 01/13/23 14:13

Client Sample ID: SS01

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	44290	01/18/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	44311	01/19/23 18:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44470	01/20/23 13:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			45008	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	44896	01/27/23 23:37	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 04:28	СН	EET MID

Client Sample ID: SS02

Date Collected: 01/11/23 13:50 Date Received: 01/13/23 14:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	44290	01/18/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	44311	01/19/23 19:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44470	01/20/23 13:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			45008	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	44896	01/27/23 23:59	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 04:46	CH	EET MID

Client Sample ID: SS03 Date Collected: 01/11/23 13:55 Date Received: 01/13/23 14:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	44342	01/19/23 13:17	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	44418	01/21/23 19:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44470	01/23/23 12:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			45008	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	44896	01/28/23 00:21	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 04:52	СН	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Page 36 of 90

Client: Ensolum Job ID: 890-3844-1 2 Project/Site: SEMU Permian Battery SDG: 03D2057088 2 Laboratory: Eurofins Midland 3 Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below. 4 Authority Program Identification Number Expiration Date Texas NELAP 06-30-23 5 The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. 6 Analysis Method Prep Method Matrix Analyte 7 Total BTEX Solid Total BTEX 8 9 10 11 11 10 11 12			concultation/0	cruncation ouninary		
Laboratory: Eurofins Midland Image: Construction of the second secon	Client: Ensolum					
Authority Program Identification Number Expiration Date 4 Texas NELAP Tot4704400-22-25 06-30-23 5 The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. 6 Analysis Method Prep Method Matrix Analyte 6 8015 NM Solid Total TPH 7 7 Total BTEX Solid Total BTEX 8 9	Project/Site: SEMU Pe	rmian Battery			SDG: 03D2057068	
Authority Program Identification Number Expiration Date 4 Texas NELAP T104704400-22-25 06-30-23 5 The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. Analyte 6 Analysis Method Prep Method Matrix Analyte 6 7 Total BTEX Solid Total BTEX 8 9	Laboratory: Eurof	ins Midland				
Texas NELAP T104704400-22-25 06-30-23 5 The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. 6 6 Analysis Method Prep Method Matrix Analyte 6 8015 NM Solid Total TPH 7 Total BTEX Solid Total BTEX 8 9 0 0 0 9 0 0 0	Unless otherwise noted, all a	analytes for this laboratory we	e covered under each acc	reditation/certification below.		
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. 6 Analysis Method Prep Method Matrix Analyte 8015 NM Solid Total TPH Total BTEX Solid Total BTEX 8	Authority	Pro	gram	Identification Number	Expiration Date	
Interfollowing analytes are included in this report, but the laboratory is not certified by the governing additionly. This list may include analytes for which the agency does not offer certification. 6 Analysis Method Prep Method Matrix Analyte 6 8015 NM Solid Total TPH 7 Total BTEX Solid Total BTEX 8	Texas	NE	LAP	T104704400-22-25	06-30-23	E
Analysis Method Prep Method Matrix Analyte O 8015 NM Solid Total TPH 7 Total BTEX Solid Total BTEX 8	The following analytes	are included in this report, but	the laboratory is not certif	fied by the governing authority. This list ma	ay include analytes for which	5
Analysis Method Matrix Analyte 8015 NM Solid Total TPH Total BTEX Solid Total BTEX 9	the agency does not of	fer certification.				
Total BTEX Solid Total BTEX 7		Prep Method				
8						
9	Total BTEX		Solid	Total BTEX		
9						8
						9
10 11 12						
11						10
13						13
13						

Eurofins Carlsbad

Method Summary

Client: Ensolum Project/Site: SEMU Permian Battery Job ID: 890-3844-1 SDG: 03D2057068

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
3015B 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
3015NM Prep	Microextraction	SW846	EET MID
OI 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

Client: Ensolum Project/Site: SEMU Permian Battery

Job ID: 890-3844-1 SDG: 03D2057068

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-3844-1	SS01	Solid	01/11/23 13:45	01/13/23 14:13	0.25'	4
890-3844-2	SS02	Solid	01/11/23 13:50	01/13/23 14:13	0.25'	
890-3844-3	SS03	Solid	01/11/23 13:55	01/13/23 14:13	0.25'	5
						8
						9
						1:
						1:

Received by OCD: 7/20/2023 2:24:59 PM

1/30/2023

eurofins Environment Testing

Chain of Custody

13

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

Work Order No: _____

																				xenco.			of								
Project Manager:	Kalei	Jennings				Bill to: (i	Bill to: (if different) Kale				Kalei Jennings								Work Order Comments												
Company Name:	Enso	lum, LLC				Compar	Company Name: Ensolum, LLC					Program: UST/PST PRP Brownfields RRC Superfund																			
Address:	601	N Marienfe	eld St S	uite 400		Address	Address: 601 N Marienfeld St Suite 400						State of Project: Reporting: Level IILevel III PST/UST TRRP Level IV																		
City, State ZIP:	Midla	nd, TX 79	701			City, Sta	te ZIP:		Midla	nd, TX	79701																				
Phone:	817-6	583-2503			Email:	kjennin	gs@en	solum	n.com,	hgree	en@er	solum	com			Del	Deliverables: EDD ADaPT Other:														
Project Name:		SEMU P	ermian	Battery	Turr	Around		ANALYSIS RE				EQUEST						Preservative Codes													
Project Number:	031		5700	68	Routine	🗌 Rusi	n	Pres. Code														None: NO	DI Water: H ₂ 0								
Project Location:			Lea		Due Date:																	Cool: Cool	MeOH: Me								
Sampler's Name:		Peter	Van Pa	tten	TAT starts th																	HCL: HC	HNO3: HN								
PO #:					the lab, if red		:30pm 2										H ₂ S0₄: H ₂	NaOH: Na													
SAMPLE RECE	IPT	Temp E		Yes No	Wet Ice:	Yes	No	Parameters	(0)				1	1.0018		ING H ANN	AN MAN THE REPORT OF THE PARTY OF				H₃PO₄: HP										
Samples Received	Intact:	Yes		Thermometer		tinn	-D7	arar	300	8			1			HA HAA						NaHSO₄: NABIS Na₂S₂O₃: NaSO₃									
Cooler Custody Sea	als:	Yes No	NIA	Correction Fa	ictor:		1.7	a	PA																						
Sample Custody Se	als:	Yes No	NA	Temperature		1.	2		IS (B	-	=			I TAN GAN IN	in a Custody					Zn Acetate											
Total Containers:				Corrected Te	mperature:		0		, ä	015	(802			89	0-3844	nain of Cust		nain of Custody			in of Custody				NaOH+Asc	orbic Acid: SAPC					
Sample Ide	ntificat	lion	Matrix	Matrix	Matrix	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)																Sam	ole Comments
SS	01		Soil	1/11/2023	1345	0.25'	Comp	1	x	x	x								ļ			-									
SS	02		Soil	1/11/2023	1350	0.25'	Comp	1	x	x	x							-				L									
SS	03		Soil	1/11/2023	1355	0.25'	Comp	1	×	x	×						_	-													
							ļ			-		┝──┼			-+																
															-+			-				+									
											ļ			_		-	_														
											<u> </u>												11.11.7.								
Total 200.7 / 6		200.8 / 6			RCRA 13P														Se A			a Sr 11 Sn /245.1/747									
Circle Method(s) a					TCLP / S														-			243.1774									
otice: Signature of this f service. Eurofins Xer	aco will b	vino eldeil e	for the co	et of samples and	shall not assu	me any res	nonsibilit	v for an	v losses	s or exp	enses in	curred b	the clie	ent if su	ch losse:	s are due	o circum	stances	peyond t	he contr	0										
f Eurofins Xenco. A mi	inimum c	harge of \$85	.00 will be	applied to each p	project and a ch	arge of \$5	for each s	sample	submitte	ed to Eu	irofins X	enco, bul	not ana	lyzed. 1	hese ter	ms will be	enforced	uniess	revious	ly negoti	ateu.										
Relinquished b		nature)	12	Received	d by: (Signa	ture)	1			/Time			inquist	hed b	y: (Sig	nature)		Rec	eived t	oy: (Sig	gnatu	ire)	Date/Time								
Peter Un Per	term		1 cha	NOA A	Va X-	0	T	11-1	3-2	25	141	22					1														
10/00/00/1-1	1.			2000	an 2	ung			2-6	12	11	-					-														

Chain of Custody Record

13



🖏 eurofins 🗉

1/30/2023 Environment Testing

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

1089 N Canal St.

Page 40 of 90

Received by OCD: 7/20/2023 2:24:59 PM

Client Information (Sub Contract Lab)	Sampler				mer	Jess	essica					Carrier Tracking No(s)						COC № 890-1102 1				
Client Contact: Shipping/Receiving	Phone:			E-Ma Jes		Kran	ner@])et.e	urofi	nsus	com	ו			of Origin. / Mexico				Page Page 1 of 1			
Company Eurofins Environment Testing South Centr							itations Required (See note) P - Texas									Job # 890-3844-1						
Address 1211 W Florida Ave, ,	Due Date Request 1/19/2023	ed					Analysis Requested									Preservation Code						
City Midland	TAT Requested (d	ays):					T		T				equ			T		ľ		A HUL B NaOH C Zn Acetate	M Hexane N None O AsNaO2	
State Zip: TX, 79701					Clark and	and the first	II TPH													E NaHSO4	P Na2O4S Q Na2SO3 R Na2S2O3	
Phone: 432-704-5440(Tel)	PO #:				0		OD) Fu		ide											G Amchlor H Ascorbic Acid	S H2SO4 T TSP Dodecahydra	ate
Email:	WO # [.]				s or h	9 2	ep (M		Chlor	TEX									2	J DI Water	U Acetone V MCAA W pH 4-5	
Project Name SEMU Permian Battery	Project #: 89000094				le (Ye	es or	A_S_N		LEACH	HOD) B											Y Trizma Z other (specify)	
Site	SSOW#:) asi	115NP			Calc (I	2									Other [.]		
		Sample	Sample Type (C=comp,	Matrix (W=water S≖solid, O=waste/oil, BT≃Tissue,	ld Filtered	Perform MS/N	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chioride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV								Total Number of			
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) Preservat	A=Air)	Eie	- Be	8	8	8	802	Į	and and an							<u>2</u>	Special Ins	tructions/Note	
SS01 (890-3844-1)	1/11/23	13 45	Preservat	Solid	Ĥ	4	x	x	x	x	x	i i i i i i i i i i i i i i i i i i i				4			Å			
SS02 (890-3844-2)	1/11/23	Mountain 13 50		Solid	╂┨	<u> </u>	x		$\frac{1}{x}$	^ X	x								1			
SS03 (890-3844-3)	1/11/23	Mountain 13 55		Solid	╂╂		x		x	x	x		_						1			
· · · · · · · · · · · · · · · · · · ·		Mountain			╋╋														199 199		·······	
					\mathbf{H}	+								_		1						
						+										1						
																1						
					Π																	
Note. Since laboratory accreditations are subject to change Eurofins Environme laboratory does not currently maintain accreditation in the State of Origin listed a accreditation status should be brought to Eurofins Environment Testing South C	bove for analysis/test	s/matrix being	analyzed the sa	amples must	he shi	inned	hark	to the	Furd	fine 🖓	wiron	mont T	"oetina	South	Contr	1110	lohora	toni o	r othe	ar instructions will be a	rouided Amuchenes	
Possible Hazard Identification Unconfirmed						San						nay b					les al			ed longer than 1	-	
Deliverable Requested 1 II III, IV Other (specify)	Primary Deliver	able Rank	2			Spe		e <i>tum</i> Instru				quire		sposa s	l By I	ab			Arch	ive For	Months	****
Empty Kit Relinquished by		Date			Tin	ne /	7							Me	ethod o	of Shipr	nent					
Relinquished by	Date/Time [.]		ľ	Company		Ì	fece	ved by	1	λT		12	Ì			Date	/Time	,			Company	
Relinquished by	Date/Time			Company		¹	Recei	ved by	\sum_{i}	H		<u> </u>				Date	/Time				Company	
Relinquished by	Date/Time			Company			Recei	ved by	r							Date	/Time				Company	
Custody Seals Intact: Custody Seal No △ Yes △ No	1					(Coole	r Tem	peratu	ure(s)	°C an	d Othe	r Rem	arks		l					<u> </u>	

.

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3844 List Number: 1 Creator: Stutzman, Amanda

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

List Source: Eurofins Carlsbad

14

Job Number: 890-3844-1 SDG Number: 03D2057068

List Source: Eurofins Midland

List Creation: 01/17/23 11:09 AM

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 3844 List Number: 2 Creator: Teel, Brianna

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

Received by OCD: 7/20/2023 2:24:59 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 1/30/2023 9:48:01 AM

JOB DESCRIPTION

SEMU Permian Battery SDG NUMBER 03D2057068

JOB NUMBER

890-3851-1

FOR ennings nsolum feld St. ite 400 79701 48:01 AM

See page two for job notes and contact information.

Received by OCD: 7/20/2023 2:24:59 PM

1

Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 1/30/2023 9:48:01 AM

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

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

Laboratory Job ID: 890-3851-1 SDG: 03D2057068

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	15
Lab Chronicle	17
Certification Summary	19
Method Summary	20
Sample Summary	21
Chain of Custody	22
Receipt Checklists	24

Client: Ensolum
Project/Site: SEMU Permian Battery

	Definitions/Glossary		
Client: Ensol Project/Site:	um SEMU Permian Battery	Job ID: 890-3851-1 SDG: 03D2057068	2
Qualifiers			3
GC VOA Qualifier	Qualifier Description		4
F1 U	MS and/or MSD recovery exceeds control limits.		
GC Semi VO	Indicates the analyte was analyzed for but not detected.		5
Qualifier	Qualifier Description		
F1	MS and/or MSD recovery exceeds control limits.		
F2	MS/MSD RPD exceeds control limits		
S1-	Surrogate recovery exceeds control limits, low biased.		_
S1+	Surrogate recovery exceeds control limits, high biased.		8
U	Indicates the analyte was analyzed for but not detected.		

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

TNTC Too Numerous To Count

Page 47 of 90

Job ID: 890-3851-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3851-1

Receipt

The samples were received on 1/13/2023 2:13 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS04 (890-3851-1), SS05 (890-3851-2), SS06 (890-3851-3) and SS07 (890-3851-4).

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-44233 and analytical batch 880-44315 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-44232 and analytical batch 880-44899 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: SS05 (890-3851-2), SS06 (890-3851-3), SS07 (890-3851-4), (LCS 880-44232/2-A), (MB 880-44232/1-A), (890-3851-A-1-C MS) and (890-3851-A-1-D MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-44195 and analytical batch 880-44277 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: 890-3851-1 SDG: 03D2057068

Matrix: Solid

5

Lab Sample ID: 890-3851-1

Client Sample ID: SS04

Project/Site: SEMU Permian Battery

Date Collected: 01/11/23 14:00 Date Received: 01/13/23 14:13

Sample Depth: 0.25'

Client: Ensolum

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/18/23 10:19	01/19/23 18:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/18/23 10:19	01/19/23 18:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/18/23 10:19	01/19/23 18:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/18/23 10:19	01/19/23 18:10	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/18/23 10:19	01/19/23 18:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/18/23 10:19	01/19/23 18:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			01/18/23 10:19	01/19/23 18:10	1
1,4-Difluorobenzene (Surr)	79		70 - 130			01/18/23 10:19	01/19/23 18:10	1
	15		10 - 130			01/10/23 10.19	01/19/23 10.10	1
		culation	70 - 730			01/10/23 10.19	01/19/23 10.10	1
Method: TAL SOP Total BTEX	- Total BTEX Calc	culation Qualifier	RL	Unit	D	Prepared	Analyzed	/ Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Calc	Qualifier		Unit mg/Kg	<u>D</u>			Dil Fac
Method: TAL SOP Total BTEX Analyte	- Total BTEX Calc Result <0.00398	Qualifier U	RL 0.00398		D		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Calc Result <0.00398 esel Range Organ	Qualifier U	RL 0.00398		<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte	- Total BTEX Calc Result <0.00398 esel Range Organ	Qualifier U ics (DRO) (Qualifier	RL 0.00398	mg/Kg		Prepared	Analyzed 01/20/23 14:02	1
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die	- Total BTEX Calc Result <0.00398 esel Range Organ Result <49.9	Qualifier U ics (DRO) (Qualifier U	RL 0.00398 GC) RL 49.9	mg/Kg Unit		Prepared	Analyzed 01/20/23 14:02 Analyzed	1
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Calc Result <0.00398 esel Range Organ Result <49.9 Diesel Range Orga	Qualifier U ics (DRO) (Qualifier U	RL 0.00398 GC) RL 49.9	mg/Kg Unit		Prepared	Analyzed 01/20/23 14:02 Analyzed	1

49.9

49.9

mg/Kg

mg/Kg

Unit

mg/Kg

01/18/23 10:17

01/18/23 10:17

Prepared

01/18/23 10:17

01/18/23 10:17

Prepared

D

01/27/23 14:56

01/27/23 14:56

Analyzed

01/27/23 14:56

01/27/23 14:56

Analyzed 01/19/23 06:37

Lab Sample ID: 890-3851-2

1

1

1

1

1

Dil Fac

Dil Fac

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	82		70 - 130		
o-Terphenyl	91		70 - 130		
Method: MCAWW 300.0 - Anior	is, Ion Chromato	graphy - So	oluble		
Method: MCAWW 300.0 - Anior Analyte		<mark>graphy - S</mark> Qualifier	oluble RL		

<49.9 U F1 F2

<49.9 U

Client Sample ID: SS05 Date Collected: 01/11/23 14:05 Date Received: 01/13/23 14:13

Sample Depth: 0.25'

(GRO)-C6-C10

C10-C28)

Diesel Range Organics (Over

Oll Range Organics (Over C28-C36)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/18/23 10:19	01/19/23 18:30	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/18/23 10:19	01/19/23 18:30	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/18/23 10:19	01/19/23 18:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/18/23 10:19	01/19/23 18:30	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/18/23 10:19	01/19/23 18:30	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/18/23 10:19	01/19/23 18:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			01/18/23 10:19	01/19/23 18:30	1

Eurofins Carlsbad

Released to Imaging: 10/16/2023 8:41:20 AM

Client Sample Results

Job ID: 890-3851-1 SDG: 03D2057068

Lab Sample ID: 890-3851-2

Client Sample ID: SS05

Project/Site: SEMU Permian Battery

Date Collected: 01/11/23 14:05 Date Received: 01/13/23 14:13

Sample Depth: 0.25'

Client: Ensolum

Method: SW846 8021B - Volatile C	organic Comp	ounds (GC)) (Continued)					
Surrogate	%Recovery		Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	70		70 - 130			01/18/23 10:19	01/19/23 18:30	1
Method: TAL SOP Total BTEX - To	tal BTEX Calo	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			01/20/23 14:02	1
– Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			01/30/23 09:56	1
– Method: SW846 8015B NM - Diese	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		01/18/23 10:17	01/27/23 17:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		01/18/23 10:17	01/27/23 17:55	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/18/23 10:17	01/27/23 17:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	64	S1-	70 - 130			01/18/23 10:17	01/27/23 17:55	1
o-Terphenyl	60	S1-	70 - 130			01/18/23 10:17	01/27/23 17:55	1
- Method: MCAWW 300.0 - Anions,	Ion Chromato	ography - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.9		4.95	mg/Kg			01/19/23 06:43	1

Client Sample ID: SS06

Date Collected: 01/11/23 14:10 Date Received: 01/13/23 14:13 Sample Depth: 0.25'

Lab Sample ID: 890-3851-3

Matrix: Solid

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/18/23 10:19	01/19/23 18:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/18/23 10:19	01/19/23 18:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/18/23 10:19	01/19/23 18:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/18/23 10:19	01/19/23 18:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/18/23 10:19	01/19/23 18:51	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/18/23 10:19	01/19/23 18:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			01/18/23 10:19	01/19/23 18:51	1
1,4-Difluorobenzene (Surr)	75		70 - 130			01/18/23 10:19	01/19/23 18:51	1
- Method: TAL SOP Total BTEX	- Total BTEX Cald	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/20/23 14:02	1
- Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg		,	01/30/23 09:56	1

Eurofins Carlsbad

Matrix: Solid

Released to Imaging: 10/16/2023 8:41:20 AM

Job ID: 890-3851-1 SDG: 03D2057068

Matrix: Solid

Dil Fac

1

1

Dil Fac 1

Matrix: Solid

Lab Sample ID: 890-3851-3

Lab Sample ID: 890-3851-4

Client Sample ID: SS06

Project/Site: SEMU Permian Battery

Date Collected: 01/11/23 14:10 Date Received: 01/13/23 14:13

Sample Depth: 0.25'

Client: Ensolum

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		01/18/23 10:17	01/27/23 18:17
(GRO)-C6-C10							
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		01/18/23 10:17	01/27/23 18:17
C10-C28)							
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/18/23 10:17	01/27/23 18:17
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed
1-Chlorooctane	65	S1-	70 - 130			01/18/23 10:17	01/27/23 18:17
o-Terphenyl	60	S1-	70 - 130			01/18/23 10:17	01/27/23 18:17

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.9	5.00	mg/Kg			01/19/23 06:49	1

Client Sample ID: SS07

Date Collected: 01/11/23 14:15 Date Received: 01/13/23 14:13

Sample Depth: 0.25'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/18/23 10:19	01/19/23 19:11	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/18/23 10:19	01/19/23 19:11	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/18/23 10:19	01/19/23 19:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/18/23 10:19	01/19/23 19:11	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/18/23 10:19	01/19/23 19:11	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/18/23 10:19	01/19/23 19:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130			01/18/23 10:19	01/19/23 19:11	1
1,4-Difluorobenzene (Surr)	92		70 - 130			01/18/23 10:19	01/19/23 19:11	1
Total BTEX	<0.00402	0	0.00402	mg/Kg			01/20/23 14:02	1
				mg/Kg			01/20/23 14:02	1
Method: SW846 8015 NM - Diese	I Range Organ			mg/Kg Unit	D	Prepared	01/20/23 14:02 Analyzed	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte	I Range Organ	<mark>ics (DRO) (</mark> Qualifier	GC)		<u>D</u>	Prepared		·
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <49.8	ics (DRO) (Qualifier U	GC) 	Unit	<u>D</u>	Prepared	Analyzed	·
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result <49.8 sel Range Orga	ics (DRO) (Qualifier U	GC) 	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	el Range Organ Result <49.8 sel Range Orga	ics (DRO) (Qualifier U nics (DRO) Qualifier	GC) <u> RL</u> 49.8 (GC)	Unit mg/Kg			Analyzed 01/30/23 09:56	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	el Range Organ Result <49.8 sel Range Orga Result	ics (DRO) (Qualifier U nics (DRO) Qualifier U	GC)49.8(GC)RL	Unit mg/Kg Unit		Prepared	Analyzed 01/30/23 09:56 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <49.8 sel Range Orga Result <49.8	ics (DRO) (Qualifier U nics (DRO) Qualifier U	GC) <u>RL</u> 49.8 (GC) <u>RL</u> 49.8 	Unit mg/Kg Unit mg/Kg		Prepared 01/18/23 10:17	Analyzed 01/30/23 09:56 Analyzed 01/27/23 18:40	Dil Fac 1 Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result <49.8 sel Range Orga Result <49.8	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) <u>RL</u> 49.8 (GC) <u>RL</u> 49.8 	Unit mg/Kg Unit mg/Kg		Prepared 01/18/23 10:17	Analyzed 01/30/23 09:56 Analyzed 01/27/23 18:40	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	el Range Organ Result <49.8 sel Range Orga Result <49.8 <49.8	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) <u>RL</u> 49.8 (GC) <u>RL</u> 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 01/18/23 10:17 01/18/23 10:17	Analyzed 01/30/23 09:56 Analyzed 01/27/23 18:40 01/27/23 18:40	Dil Fac 1 Dil Fac 1

Eurofins Carlsbad

01/18/23 10:17 01/27/23 18:40

5

o-Terphenyl

70 - 130

35 S1-

1

		Client	Sample Res	sults					1
Client: Ensolum Project/Site: SEMU Permian Battery							Job ID: 890 SDG: 03D2		2
Client Sample ID: SS07 Date Collected: 01/11/23 14:15						Lab Sa	mple ID: 890- Matri	3851-4 ix: Solid	
Date Received: 01/13/23 14:13 Sample Depth: 0.25'									4
Method: MCAWW 300.0 - Anions, Analyte		ography - Solu Qualifier	uble RL	Unit	D	Prepared	Analyzed	Dil Fac	5
Chloride	53.7		4.99	mg/Kg		Freparea	01/19/23 06:55	1	
									8
									9
									13

Eurofins Carlsbad

Client: Ensolum Project/Site: SEMU Permian Battery

Method: 8021B - Volatile Organic Compounds (GC) Matrix: Solid

Percent Surrogate Recovery (Acceptance Limits) BFB1 DFBZ1 Client Sample ID (70-130) (70-130) Lab Sample ID 890-3837-A-1-F MS Matrix Spike 118 93 890-3837-A-1-G MSD Matrix Spike Duplicate 125 89 890-3851-1 SS04 100 79 SS05 890-3851-2 90 70 890-3851-3 SS06 95 75 890-3851-4 SS07 84 92 LCS 880-44233/1-A Lab Control Sample 111 98 LCSD 880-44233/2-A Lab Control Sample Dup 118 98 MB 880-44233/5-A Method Blank 86 89

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Γ				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3851-1	SS04	82	91	
890-3851-1 MS	SS04	33 S1-	29 S1-	
890-3851-1 MSD	SS04	63 S1-	60 S1-	
890-3851-2	SS05	64 S1-	60 S1-	
890-3851-3	SS06	65 S1-	60 S1-	
890-3851-4	SS07	40 S1-	35 S1-	
LCS 880-44232/2-A	Lab Control Sample	112	131 S1+	
LCSD 880-44232/3-A	Lab Control Sample Dup	99	114	
MB 880-44232/1-A	Method Blank	138 S1+	171 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

6

Job ID: 890-3851-1 SDG: 03D2057068

Prep Type: Total/NA

QC Sample Results

Page 53 of 90

Job ID: 890-3851-1 SDG: 03D2057068

Prep Type: Total/NA

Prep Batch: 44233

Client Sample ID: Method Blank

Project/Site: SEMU Permian Battery Method: 8021B - Volatile Organic Compounds (GC)

-	
Lab Sample ID: MB 880-44233/5-A	
Matrix: Calid	

Matrix: Solid Analysis Batch: 44315

Client: Ensolum

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/18/23 10:19	01/19/23 11:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/18/23 10:19	01/19/23 11:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/18/23 10:19	01/19/23 11:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/18/23 10:19	01/19/23 11:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/18/23 10:19	01/19/23 11:18	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/18/23 10:19	01/19/23 11:18	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130			01/18/23 10:19	01/19/23 11:18	1
1,4-Difluorobenzene (Surr)	89		70 - 130			01/18/23 10:19	01/19/23 11:18	1

Lab Sample ID: LCS 880-44233/1-A Matrix: Solid

Analysis Batch: 44315

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09302		mg/Kg		93	70 - 130	
Toluene	0.100	0.1051		mg/Kg		105	70 - 130	
Ethylbenzene	0.100	0.1002		mg/Kg		100	70 - 130	
m-Xylene & p-Xylene	0.200	0.2237		mg/Kg		112	70 - 130	
o-Xylene	0.100	0.1240		mg/Kg		124	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-44233/2-A

Matrix: Solid

Analysis Batch: 44315							Prep	Batch:	44233
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08899		mg/Kg		89	70 - 130	4	35
Toluene	0.100	0.09908		mg/Kg		99	70 - 130	6	35
Ethylbenzene	0.100	0.09883		mg/Kg		99	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2179		mg/Kg		109	70 - 130	3	35
o-Xylene	0.100	0.1201		mg/Kg		120	70 - 130	3	35

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

Lab Sample ID: 890-3837-A-1-F MS

Matrix: Solid aluaia Batahi 44245

Analysis Batch: 44315									Prep	Batch: 44233
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1	0.100	0.07169		mg/Kg		72	70 - 130	
Toluene	<0.00201	U	0.100	0.08711		mg/Kg		86	70 - 130	

sbad

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 44233

3

Eurofins	Carls

Client Sample ID: Matrix Spike

QC Sample Results

MS MS

MSD MSD

0.06851 F1

0.08518

0.08703

0.1902

0.1053

Result Qualifier

Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Result

0.08720

0.1951

0.1066

Spike

Added

0.100

0.200

0.100

Limits 70 - 130

70 - 130

Spike

Added

Client: Ensolum Project/Site: SEMU Permian Battery

Lab Sample ID: 890-3837-A-1-F MS

Lab Sample ID: 890-3837-A-1-G MSD

Matrix: Solid

Analyte

o-Xylene

Surrogate

Matrix: Solid

Analyte

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 44315

4-Bromofluorobenzene (Surr)

Analysis Batch: 44315

1,4-Difluorobenzene (Surr)

Sample Sample

<0.00201

<0.00402 U

<0.00201 U

%Recovery

Result Qualifier

U

MS MS

118

93

Sample Sample

Result Qualifier

Qualifier

Job ID: 890-3851-1 SDG: 03D2057068

%Rec

Limits

%Rec

Limits

%Rec

87

97

106

%Rec

69

86

88

96

106

D

D

Client Sample ID: Matrix Spike Prep Type: Total/NA Prep Batch: 44233 70 - 130 70 - 130 70 - 130 7 **Client Sample ID: Matrix Spike Duplicate** Prep Type: Total/NA Prep Batch: 44233 RPD Limit RPD 70 - 130 5 35 70 - 130 2 35 70 - 130 35 0 35 70 - 130 3 70 - 130 1 35

Benzene	<0.00201	U F1	0.0990
Toluene	<0.00201	U	0.0990
Ethylbenzene	<0.00201	U	0.0990
m-Xylene & p-Xylene	<0.00402	U	0.198
o-Xylene	<0.00201	U	0.0990
	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-44232/1-A Matrix: Solid Analysis Batch: 44899						Client Sa	mple ID: Metho Prep Type: 1 Prep Batch	Total/NA
	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		01/18/23 10:17	01/27/23 11:09	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		01/18/23 10:17	01/27/23 11:09	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/18/23 10:17	01/27/23 11:09	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130			01/18/23 10:17	01/27/23 11:09	1
o-Terphenyl	171	S1+	70 - 130			01/18/23 10:17	01/27/23 11:09	1
Lab Sample ID: LCS 880-44232/2-A					c	lient Sample I	D: Lab Control	Sample
Matrix: Solid						•	Prep Type: 1	

Matrix: Solid Analysis Batch: 44899

Analysis Batch: 44899							Prep	Batch: 44232
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1100		mg/Kg		110	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1256		mg/Kg		126	70 - 130	
C10-C28)								

Eurofins Carlsbad

QC Sample Results

Client: Ensolum Project/Site: SEMU Permian Battery

Lab Sample ID: LCS 880-44232/2-A

Matrix: Solid

C10-C28)

Diesel Range Organics (Over

Analysis Batch: 44899

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

LCS LCS

sults	1
Job ID: 890-3851-1 SDG: 03D2057068	2
nued)	3
Client Sample ID: Lab Control Sample	
Prep Type: Total/NA	4
Prep Batch: 44232	5
	6
Client Sample ID: Lab Control Sample Dup	7
Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA	0
Prep Batch: 44232	0

Page 55 of 90

Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane		quanner	70 - 130								
o-Terphenyl		S1+	70 - 130 70 - 130								
	151	071	70 - 150								
Lab Sample ID: LCSD 880-4	4232/3-A					Clie	nt San	nple ID:	Lab Contro	ol Sampl	e Dup
Matrix: Solid										Type: To	
Analysis Batch: 44899										Batch:	
· · · · · , · · · · · · · · · · · · · · · · · · ·			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics			1000	1108		mg/Kg		111	70 - 130	1	20
(GRO)-C6-C10											
Diesel Range Organics (Over			1000	1205		mg/Kg		121	70 - 130	4	20
C10-C28)											
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	99		70 - 130								
o-Terphenyl	114		70 - 130								
Lab Sample ID: 890-3851-1	MS								Client Sa	mple ID:	SS04
Matrix: Solid									Prep [•]	Type: To	tal/NA
Analysis Batch: 44899									Prep	Batch:	44232
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	<49.9	U	998	786.3		mg/Kg		75	70 - 130		
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U F1 F2	998	436.4	F1	mg/Kg		40	70 - 130		
C10-C28)											
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	33	S1-	70 - 130								
o-Terphenyl	29	S1-	70 - 130								
Lab Sample ID: 890-3851-1	MSD								Client Sa	mple ID:	SS04
Matrix: Solid									Prep [·]	Type: To	tal/NA
Analysis Batch: 44899									Prep	Batch:	44232
	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	997	817.0		mg/Kg		79	70 - 130	4	20
(GRO)-C6-C10											

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	63	S1-	70 - 130
o-Terphenyl	60	S1-	70 - 130

<49.9 U F1 F2

Eurofins Carlsbad

67

20

Released to Imaging: 10/16/2023 8:41:20 AM

997

872.1 F2

mg/Kg

83

70 - 130

Client: Ensolum

QC Sample Results

Job ID: 890-3851-1 SDG: 03D2057068

Project/Site: SEMU Permian Battery

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44195/1-A										•	Client S	ample ID:		
Matrix: Solid												Prep	Type: S	oluble
Analysis Batch: 44277														
	_	MB N							_	_				
Analyte			Qualifier		RL			nit	D	Pr	epared	Analy		Dil Fac
Chloride	<	<5.00 l	J		5.00		m	g/Kg				01/19/23	04:09	1
_ Lab Sample ID: LCS 880-44195/2-A									Cli	ent	Sample	ID: Lab C	ontrol S	ample
Matrix: Solid												Prep	Type: S	oluble
Analysis Batch: 44277														
				Spike		LCS	LCS					%Rec		
Analyte				Added		Result	Qualifie	r Unit		D	%Rec	Limits		
Chloride				250		263.7		mg/Kg			105	90 _ 110		
- Lab Sample ID: LCSD 880-44195/3-	Α							CI	ient S	am	ole ID: I	Lab Contro	ol Sampl	le Dur
Matrix: Solid													Type: S	
Analysis Batch: 44277														
-				Spike		LCSD	LCSD					%Rec		RPD
Analyte				Added		Result	Qualifie	r Unit		D	%Rec	Limits	RPD	Limit
Chloride				250		263.6		mg/Kg			105	90 _ 110	0	20
Lab Sample ID: 890-3850-A-3-B MS											Client	Sample IE	D: Matrix	Spike
Matrix: Solid													Type: S	
Analysis Batch: 44277														
	Sample	Sampl	le	Spike		MS	MS					%Rec		
Analyte	Result	Qualifi	ier	Added		Result	Qualifie	r Unit		D	%Rec	Limits		
Chloride	52.4	F1		250		268.9	F1	mg/Kg			87	90 _ 110		
- Lab Sample ID: 890-3850-A-3-C MS	D								Client	t Sa	mple ID): Matrix S	pike Dur	olicate
Matrix: Solid													Type: S	
Analysis Batch: 44277														
-	Sample	Sampl	le	Spike		MSD	MSD					%Rec		RPD
Analyte	Result	Qualifi	ier	Added		Result	Qualifie	r Unit		D	%Rec	Limits	RPD	Limit
Chloride	52.4	F 4		250		266.6	F1	mg/Kg			86	90 - 110	1	20

QC Association Summary

Client: Ensolum Project/Site: SEMU Permian Battery

8 9

Job ID: 890-3851-1 SDG: 03D2057068

GC VOA

Prep Batch: 44233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3851-1	SS04	Total/NA	Solid	5035	
390-3851-2	SS05	Total/NA	Solid	5035	
390-3851-3	SS06	Total/NA	Solid	5035	
390-3851-4	SS07	Total/NA	Solid	5035	
/IB 880-44233/5-A	Method Blank	Total/NA	Solid	5035	
CS 880-44233/1-A	Lab Control Sample	Total/NA	Solid	5035	
CSD 880-44233/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
90-3837-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
90-3837-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 44315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-3851-1	SS04	Total/NA	Solid	8021B	44233	
890-3851-2	SS05	Total/NA	Solid	8021B	44233	
890-3851-3	SS06	Total/NA	Solid	8021B	44233	
890-3851-4	SS07	Total/NA	Solid	8021B	44233	
MB 880-44233/5-A	Method Blank	Total/NA	Solid	8021B	44233	
LCS 880-44233/1-A	Lab Control Sample	Total/NA	Solid	8021B	44233	4.9
LCSD 880-44233/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	44233	13
890-3837-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	44233	
890-3837-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	44233	

Analysis Batch: 44471

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3851-1	SS04	Total/NA	Solid	Total BTEX	
890-3851-2	SS05	Total/NA	Solid	Total BTEX	
890-3851-3	SS06	Total/NA	Solid	Total BTEX	
890-3851-4	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 44232

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3851-1	SS04	Total/NA	Solid	8015NM Prep	
890-3851-2	SS05	Total/NA	Solid	8015NM Prep	
890-3851-3	SS06	Total/NA	Solid	8015NM Prep	
890-3851-4	SS07	Total/NA	Solid	8015NM Prep	
MB 880-44232/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-44232/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-44232/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3851-1 MS	SS04	Total/NA	Solid	8015NM Prep	
890-3851-1 MSD	SS04	Total/NA	Solid	8015NM Prep	

Analysis Batch: 44899

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3851-1	SS04	Total/NA	Solid	8015B NM	44232
890-3851-2	SS05	Total/NA	Solid	8015B NM	44232
890-3851-3	SS06	Total/NA	Solid	8015B NM	44232
890-3851-4	SS07	Total/NA	Solid	8015B NM	44232
MB 880-44232/1-A	Method Blank	Total/NA	Solid	8015B NM	44232
LCS 880-44232/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	44232

Eurofins Carlsbad

Released to Imaging: 10/16/2023 8:41:20 AM

QC Association Summary

Client: Ensolum Project/Site: SEMU Permian Battery

GC Semi VOA (Continued)

Analysis Batch: 44899 (Continued)

	Lab Sample ID LCSD 880-44232/3-A	Client Sample ID Lab Control Sample Dup	Prep Type Total/NA	Matrix Solid	Method 0015B NM	Prep Batch 44232
	890-3851-1 MS	SS04	Total/NA	Solid	8015B NM	44232
	890-3851-1 MSD	SS04	Total/NA	Solid	8015B NM	44232
A	nalysis Batch: 44994					

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3851-1	SS04	Total/NA	Solid	8015 NM	
890-3851-2	SS05	Total/NA	Solid	8015 NM	
890-3851-3	SS06	Total/NA	Solid	8015 NM	
890-3851-4	SS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 44195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3851-1	SS04	Soluble	Solid	DI Leach	
890-3851-2	SS05	Soluble	Solid	DI Leach	
890-3851-3	SS06	Soluble	Solid	DI Leach	
890-3851-4	SS07	Soluble	Solid	DI Leach	
MB 880-44195/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44195/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44195/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3850-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3850-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 44277

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3851-1	SS04	Soluble	Solid	300.0	44195
890-3851-2	SS05	Soluble	Solid	300.0	44195
890-3851-3	SS06	Soluble	Solid	300.0	44195
890-3851-4	SS07	Soluble	Solid	300.0	44195
MB 880-44195/1-A	Method Blank	Soluble	Solid	300.0	44195
LCS 880-44195/2-A	Lab Control Sample	Soluble	Solid	300.0	44195
LCSD 880-44195/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44195
890-3850-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	44195
890-3850-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44195

5

8

Job ID: 890-3851-1 SDG: 03D2057068 Project/Site: SEMU Permian Battery

5 6

9

Job ID: 890-3851-1 SDG: 03D2057068

Lab Sample ID: 890-3851-1 Matrix: Solid

Lab Sample ID: 890-3851-2

Date Collected: 01/11/23 14:00 Date Received: 01/13/23 14:13

Client Sample ID: SS04

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	44233	01/18/23 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44315	01/19/23 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44471	01/20/23 14:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			44994	01/30/23 09:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	44232	01/18/23 10:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44899	01/27/23 14:56	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 06:37	СН	EET MID

Client Sample ID: SS05

Date Collected: 01/11/23 14:05

Date Received: 01/13/23 14:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	44233	01/18/23 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44315	01/19/23 18:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44471	01/20/23 14:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			44994	01/30/23 09:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	44232	01/18/23 10:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44899	01/27/23 17:55	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 06:43	CH	EET MID

Client Sample ID: SS06

Date Collected: 01/11/23 14:10

Date	Received	d: 01/13/23	14:13

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	44233	01/18/23 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44315	01/19/23 18:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44471	01/20/23 14:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			44994	01/30/23 09:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44232	01/18/23 10:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44899	01/27/23 18:17	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 06:49	СН	EET MID

Client Sample ID: SS07 Date Collected: 01/11/23 14:15 Date Received: 01/13/23 14:13

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	44233	01/18/23 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44315	01/19/23 19:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44471	01/20/23 14:02	SM	EET MID

Eurofins Carlsbad

Matrix: Solid

Matrix: Solid

Lab Sample ID: 890-3851-3

Lab Sample ID: 890-3851-4

Matrix: Solid

Released to Imaging: 10/16/2023 8:41:20 AM

Job ID: 890-3851-1 SDG: 03D2057068

Client Sample ID: SS07 Date Collected: 01/11/23 14:15 Date Received: 01/13/23 14:13

Project/Site: SEMU Permian Battery

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			44994	01/30/23 09:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	44232	01/18/23 10:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44899	01/27/23 18:40	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 06:55	СН	EET MID

Laboratory References:

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

Eurofins Carlsbad

Lab Sample ID: 890-3851-4 Matrix: Solid 5 6 7 8 9 Accreditation/Certification Summary

	•	loor our cuttorin o	or chroad off O annuary		
Client: Ensolum Project/Site: SEMU Pe	rmian Battery			Job ID: 890-3851-1 SDG: 03D2057068	2
				0002007000	
Laboratory: Eurofi					
Unless otherwise noted, all a	analytes for this laboratory we	ere covered under each acc	reditation/certification below.		
Authority	Pr	ogram	Identification Number	Expiration Date	
Texas	N	ELAP	T104704400-22-25	06-30-23	
The following analytes	are included in this report, bu	ut the laboratory is not certil	fied by the governing authority. This list ma	ay include analytes for which	5
the agency does not of		,	, , , , , , , , , , , , , , , , , , , ,		
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
					8
					9
					10
					13
					13

Eurofins Carlsbad

Method Summary

Client: Ensolum Project/Site: SEMU Permian Battery Job ID: 890-3851-1 SDG: 03D2057068

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
	"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third E = TestAmerica Laboratories, Standard Operating Procedure	dition, November 1986 And Its Updates.	
Laboratory R			
EET MID	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

Protocol References:

Laboratory References:

Client: Ensolum Project/Site: SEMU Permian Battery Job ID: 890-3851-1 SDG: 03D2057068

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-3851-1	SS04	Solid	01/11/23 14:00	01/13/23 14:13	0.25'	
890-3851-2	SS05	Solid	01/11/23 14:05	01/13/23 14:13	0.25'	
890-3851-3	SS06	Solid	01/11/23 14:10	01/13/23 14:13	0.25'	5
890-3851-4	SS07	Solid	01/11/23 14:15	01/13/23 14:13	0.25'	
						8
						_
						9
						1:
						1

3 1 1 1 0 8 1 0 2 7 8 7 9 7

1/30/2023

🛟 eurofins

Environment Testing Xenco

Chain of Custody

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

Work Order No:

Project Manager:	Kalei	i Jennings				Bill to:	(if differer	nt)	Kalei	i Jenni	ngs					Work Order Comments								
Company Name:	Ensc	olum, LLC					ny Nam		1	olum, L						Pro	oram: U	ST/PS						perfund [
Address:	601	N Marienf	eld St S	Suite 400	an a	Addres			1			St Suite	e 400			Program: UST/PST PRP Brownfields RRC Superfund								
City, State ZIP:	Midla	and, TX 7	701			1	ate ZIP:		-					nin an		Reporting: Level II _ Level III _ PST/UST _ TRRP _ Level IV								
Phone:		683-2503			Email	City, State ZIP: Midland, TX 79701 I: kiennings@ensolum.com, hgreen@ensolum.com						Deliverables: EDD ADaPT Other:												
					Longian a rig	1		T	T	, ngre	Childre													
Project Name:	<u> </u>	SEMU P				Around	STOLEN CONTRACTOR	Pres.	1000	1		T States	-	ANAL	YSIS RE	QUES	T			1	and the second second		ervative Co	
Project Number:		23D20	570	68	Routine	C Rus	sh	Code	ļ							\vdash					N	one: NO	DIW	ater: H ₂ C
Project Location:			Lea		Due Date:						1										C	ool: Cool		H: Me
Sampler's Name: PO #:		Peter	Van Pa	itten	TAT starts th the lab, if red										I	1			8			CL: HC	HNO	-
SAMPLE RECEI	DT	-			· · · · ·			ters														₂ S0 ₄ : H ₂	NaOł	1: Na
		Temp E		Tres No	Wet Ice:) No	er.	0.0		1											3PO4: HP		
Samples Received In Cooler Custody Seal		Yes No	No CHHA	Thermometer Correction Fa		Im	-00)	Parameters	CHLORIDES (EPA: 300.0)												1 PC	aHSO4: N		
Sample Custody Sea		Yes No		Temperature			2. d		EP/				8	90-385	1 Chain of	Custo	dy					a2S2O3: N		
Total Containers:		103 110		Corrected Te	the second second		0		ES	12	51							1					orbic Acid: 5	SAPC
				Date	Time		Grab/	# of	ORIC	TPH (8015)	BTEX (8021)										100			
Sample Iden	tificat	tion	Matrix	Sampled	Sampled	Depth	Comp		GH	Her	BTE										1	Samp	ole Comme	ents
SSO	4		Soil	1/11/2023	1400	0.25'	Comp	1	x	x	x					1								
SSO	5		Soil	1/11/2023	1405	0.25'	Comp	1	x	x	x													
SSO	6		Soil	1/11/2023	1410	0.25'	Comp	1	x	x	x											And a state of the	an a	
SS0	7		Soil	1/11/2023	1415	0.25'	Comp	1	x	x	x					1								
																		T						
																							and a second share the same full also	
																							- 1.4	1949-1949-1949-1949-1949-1949-1949-1949
	_	-														Τ	T							
Total 200.7 / 60	10	200.8 / 6	020:	81	RCRA 13P	PM Te	xas 11	AI S	b As	Ba B	Be B	Cd Ca	a Cr (Co Cu	Fe Pb	Mg M	n Mo	NIKS	Se A	SiO ₂	Na S	r TI Sn	U V Zn	
Circle Method(s) ar	d Me	tal(s) to be	e analyz		TCLP / S																	5.1/747		
lotice: Signature of this of f service. Eurofins Xenc f Eurofins Xenco. A mini	o will be	e liable only f	or the cos	st of samples and	itutes a valid pu shall not assur	rchase on	der from c	lient co	mpany	to Eurol	lins Xen	ico, its afi	fillates a	nd subco	ontractors. I	it assign	s standar	1 terms	and co	nditions				
Relinquished by	(Sigr	nature)		Received	l by: (Signat	ure)	a) Date/Time Reling			Relinguished by: (Signature) Received by: (Signature)						Date/Ti	me							
	1		0		<u> </u>	-					-													
Nater 16. Tot	te-		L.	A 01 A	Nr. V		1-1	1-17	2-2	31	UR	2												

Released to Imaging: 10/16/2023 8:41:20 AM

Chain of Custody Record

13



Environment Testing

Carlsba	ad, NM 88220	
Phone	575-988-3199	Fax: 575-988-3199

1089 N Canal St.

Page 65 of 90

Received by OCD: 7/20/2023 2:24:59 PM

	Sampler Link F				DM								Corrier Treaking Ma(a)								
Client Information (Sub Contract Lab)	Sampler			Lab I Krai	mer Jessica							Са	Carrier Tracking No(s)						COC № 890-1102 1		
Client Contact: Shipping/Receiving	Phone:			E-Ma Jes		Kram	ner@)et.eu	Irofin	sus	com				Origir lexic					Page: Page 1 of 1	
Company	-							Require								<u> </u>				Job #	
Eurofins Environment Testing South Centr						LAP			JU (36	se not	•)									890-3851-1	
Address 1211 W Florida Ave, ,	Due Date Request 1/19/2023	ed			Analysis I							is R	eane	este	d					Preservation Cod	es M - Hexane
City	TAT Requested (d	ays)				North New York			Т	T		T		Τ	T	Τ	Τ	Т	(A)	A HCL B NaOH	N - None
Midland State, Zip.	-				1		Ŧ												ar all	C Zn Acetate D Nitric Acid	O AsNaO2 P Na2O4S
TX, 79701							d I													E NaHSO4	Q - Na2SO3 R Na2S2O3
Phone: 432-704-5440(Tel)	PO #:						0 Fu		e											F MeOH G Amchlor	S H2SO4 T TSP Dodecahydrate
Email:	WO #·				or No	No)	S_Prep (MOD) Full TPH		300_ORGFM_28D/DI_LEACH Chlonde	x										H Ascorbic Acid I Ice	U Acetone V MCAA
Project Name	Project #:				Yes -	Or N	Prep		E E	BI									ners	J DI Water K EDTA	W pH 4-5 Y Trizma
SEMU Permian Battery	89000094)ie (Yes	S N												ntai	L EDA	Z other (specify)
Site	SSOW# [.]				Sam	SD (8015MOD_NM/8015NM_	Ĩ		8021B/5035FP_Caic (MOD) BTEX	2								of col	Other	
			Sample	Matrix (w=water	- pai	Perform MS/MSD	8/WN	8015MOD_Calc	M Z	L L	Total_BTEX_GCV								ber		
			Туре	S≍solid, O≃waste/oil,	Fifte	Ē	8	8 8	5	/2031	BIE								Nun		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	(C=comp, G=grab)	BT≕Tissue,	ield	erfo	015N	015N		0218	g								Total		
ounperterminential - oliential (Lubia)	Sample Date		Preservat	A=Air)	X	×	<u>~</u>	<u> </u>	<u> </u>	8					-		-		Ň	Special In	structions/Note:
SS04 (890-3851-1)	1/11/23	14 00		Solid	ΠŤ		x	x	x	x	x	orpasy			مبد أتبد	مسالحه	<u></u>	in line	S		
SS05 (890-3851-2)	1/11/23	Mountain 14 05		Solid	\dagger		-+-			-	x					-			-		
SS06 (890-3851-3)	1/11/23	Mountain 14 10 Mountain		Solid	╉╋		x	x	x	x	x			+		+		+	1	9	
SS07 (890-3851-4)	1/11/23	14 15 Mountain		Solid	╋		x	x	x	x	x			-							
		INCOMUN					\uparrow		\uparrow		-†			+	╈	+		-		7	
					\dagger								+				+	╈	1200	1	
			++							+	\neg					+			- 1.1.N		
					$\uparrow \uparrow$					-							+		-		
						-	-						+	-			-	+			
Note Since laboratory accreditations are subject to change Eurofins Environme	nt Testing South Cer	tral LLC place	es the ownership	o of method a	inalyte	8 ac	credit	tation c	omplia	ance	upon	our sut	contra	act lat	orato	ries. 1	This s	ample	shipm	nent is forwarded under	chain-of-custody If the
laboratory does not currently maintain accreditation in the State of Origin listed a accreditation status should be brought to Eurofins Environment Testing South C	entral, LLC attention	immediately	analyzed the sa f all requested a	amples must	be shi are cu	pped I Irrent	back to dat	to the E te, retu	Eurofi rn the	ns En e signe	vironr ed Ch	nent Ti ain of (esting Custod	South ly atte	Cent sting	ral LL to said	.C lab I com	oraton pliance	or ot to Eu	her instructions will be urofins Environment Te	provided Any changes to sting South Central LLC
Possible Hazard Identification						Sam						nay b	ass	ess	ed if	sam	ples	are	retai	ned longer than 1	month)
Unconfirmed Deliverable Requested I, II, III IV Other (specify)	Drimon (Dolivier	able Deal	2					eturn T							l By	Lab			Arc	chive For	Months
	Primary Deliver		۷			Spec	ual li	nstruc	suon	s/QC	, Ke	quirer	nents								
Empty Kit Relinquished by	In	Date		_	Tin		1						ρ	М	ethod	of Shi	-				
Relinquisher by	Date/Time ⁻	Company			ľ	Recon	DK	J.	1	入	ىر	K	-		Da	ate/Tir	ne			Company	
Relinquished by	Date/Time:		C	Company			eceiv	ved by			<u>, , , , , , , , , , , , , , , , , , , </u>					Da	ate/Tir	ne			Company
Relinquished by	Date/Time			Company		F	Receiv	ved by					Date/Time				ne			Company	
Custody Seals Intact. Custody Seal No ∆ Yes ∆ No					Cooler Temperature(s) ^o C and Other Remarks						1										

.

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3851 List Number: 1 Creator: Stutzman, Amanda

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

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

Job Number: 890-3851-1 SDG Number: 03D2057068

List Source: Eurofins Carlsbad

Eurofins Carlsbad Released to Imaging: 10/16/2023 8:41:20 AM

14

Job Number: 890-3851-1 SDG Number: 03D2057068

List Source: Eurofins Midland

List Creation: 01/17/23 12:39 PM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3851 List Number: 2 Creator: Teel, Brianna

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

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

Eurofins Carlsbad Released to Imaging: 10/16/2023 8:41:20 AM



June 27, 2023

KALEI JENNINGS ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND, TX 79705

RE: SEMU PERMIAN

Enclosed are the results of analyses for samples received by the laboratory on 06/23/23 9:29.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Whe Singh

Mike Snyder For Celey D. Keene Lab Director/Quality Manager



		ENSOLUM, LLC KALEI JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	06/23/2023		Sampling Date:	06/20/2023
Reported:	06/27/2023		Sampling Type:	Soil
Project Name:	SEMU PERMIAN		Sampling Condition:	Cool & Intact
Project Number:	03D2057068		Sample Received By:	Shalyn Rodriguez
Project Location:	32.5584,-103.1906			

Sample ID: FS 01 4' (H233250-01)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	2.28	114	2.00	2.09	
Toluene*	<0.050	0.050	06/23/2023	ND	2.23	112	2.00	2.59	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.11	105	2.00	1.07	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	6.48	108	6.00	0.241	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/23/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	′kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	171	85.5	200	2.59	
DRO >C10-C28*	50.1	10.0	06/23/2023	ND	173	86.6	200	3.77	
EXT DRO >C28-C36	34.6	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	110 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	126 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM, LLC KALEI JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	06/23/2023		Sampling Date:	06/20/2023
Reported:	06/27/2023		Sampling Type:	Soil
Project Name:	SEMU PERMIAN		Sampling Condition:	Cool & Intact
Project Number:	03D2057068		Sample Received By:	Shalyn Rodriguez
Project Location:	32.5584,-103.1906			

Sample ID: FS 02 4' (H233250-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	2.28	114	2.00	2.09	
Toluene*	<0.050	0.050	06/23/2023	ND	2.23	112	2.00	2.59	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.11	105	2.00	1.07	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	6.48	108	6.00	0.241	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/23/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	171	85.5	200	2.59	
DRO >C10-C28*	48.0	10.0	06/23/2023	ND	173	86.6	200	3.77	
EXT DRO >C28-C36	43.1	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	105 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	122 9	6 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM, LLC KALEI JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	06/23/2023		Sampling Date:	06/20/2023
Reported:	06/27/2023		Sampling Type:	Soil
Project Name:	SEMU PERMIAN		Sampling Condition:	Cool & Intact
Project Number:	03D2057068		Sample Received By:	Shalyn Rodriguez
Project Location:	32.5584,-103.1906			

Sample ID: FS 03 4' (H233250-03)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	2.28	114	2.00	2.09	
Toluene*	<0.050	0.050	06/23/2023	ND	2.23	112	2.00	2.59	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.11	105	2.00	1.07	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	6.48	108	6.00	0.241	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/23/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	'kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	171	85.5	200	2.59	
DRO >C10-C28*	20.0	10.0	06/23/2023	ND	173	86.6	200	3.77	
EXT DRO >C28-C36	12.3	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	105 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	136 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM, LLC KALEI JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	06/23/2023		Sampling Date:	06/20/2023
Reported:	06/27/2023		Sampling Type:	Soil
Project Name:	SEMU PERMIAN		Sampling Condition:	Cool & Intact
Project Number:	03D2057068		Sample Received By:	Shalyn Rodriguez
Project Location:	32.5584,-103.1906			

Sample ID: FS 04 4' (H233250-04)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	2.28	114	2.00	2.09	
Toluene*	<0.050	0.050	06/23/2023	ND	2.23	112	2.00	2.59	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.11	105	2.00	1.07	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	6.48	108	6.00	0.241	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/23/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/24/2023	ND	171	85.5	200	2.59	
DRO >C10-C28*	17.4	10.0	06/24/2023	ND	173	86.6	200	3.77	
EXT DRO >C28-C36	11.7	10.0	06/24/2023	ND					
Surrogate: 1-Chlorooctane	105	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	118 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM, LLC KALEI JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	06/23/2023		Sampling Date:	06/20/2023
Reported:	06/27/2023		Sampling Type:	Soil
Project Name:	SEMU PERMIAN		Sampling Condition:	Cool & Intact
Project Number:	03D2057068		Sample Received By:	Shalyn Rodriguez
Project Location:	32.5584,-103.1906			

Sample ID: FS 05 4' (H233250-05)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050 0.050 06/23/2023 ND		ND	2.28	114	2.00	2.09		
Toluene*	<0.050	0.050	06/23/2023	ND	2.23	112	2.00	2.59	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.11	105	2.00	1.07	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	6.48	108	6.00	0.241	
Total BTEX	<0.300 0.300		06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID 10		% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/23/2023 ND		400	100	400	7.69	
TPH 8015M	mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/24/2023	ND	171	85.5	200	2.59	
DRO >C10-C28*	37.2	10.0	06/24/2023	ND	173	86.6	200	3.77	
EXT DRO >C28-C36	25.6	10.0	06/24/2023	ND					
Surrogate: 1-Chlorooctane	116 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	137 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM, LLC KALEI JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	06/23/2023		Sampling Date:	06/20/2023
Reported:	06/27/2023		Sampling Type:	Soil
Project Name:	SEMU PERMIAN		Sampling Condition:	Cool & Intact
Project Number:	03D2057068		Sample Received By:	Shalyn Rodriguez
Project Location:	32.5584,-103.1906			

Sample ID: FS 06 4' (H233250-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	2.28	114	2.00	2.09	
Toluene*	<0.050	0.050	06/23/2023	ND	2.23	112	2.00	2.59	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.11	105	2.00	1.07	
Total Xylenes*	<0.150 0.150		06/23/2023	ND	6.48	108	6.00	0.241	
Total BTEX	<0.300 0.300		06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID 106 % 7		6 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	06/23/2023 ND		400	100	400	7.69	
TPH 8015M	mg/	kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/24/2023	ND	171	85.5	200	2.59	
DRO >C10-C28*	45.6	10.0	06/24/2023	ND	173	86.6	200	3.77	
EXT DRO >C28-C36	35.5	10.0	06/24/2023	ND					
Surrogate: 1-Chlorooctane	104 %	6 48.2-13	4						
Surrogate: 1-Chlorooctadecane	118 9	6 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM, LLC KALEI JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	06/23/2023		Sampling Date:	06/20/2023
Reported:	06/27/2023		Sampling Type:	Soil
Project Name:	SEMU PERMIAN		Sampling Condition:	Cool & Intact
Project Number:	03D2057068		Sample Received By:	Shalyn Rodriguez
Project Location:	32.5584,-103.1906			

Sample ID: SW 01 0-4' (H233250-07)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050 0.050 06/23/2023 N		ND	2.28	114	2.00	2.09		
Toluene*	<0.050	0.050	06/23/2023	ND	2.23	112	2.00	2.59	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.11	105	2.00	1.07	
Total Xylenes*	<0.150 0.150		06/23/2023	ND	6.48	108	6.00	0.241	
Total BTEX	<0.300 0.300		06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID 105 %		71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/23/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/24/2023	ND	171	85.5	200	2.59	
DRO >C10-C28*	22.9	10.0	06/24/2023	ND	173	86.6	200	3.77	
EXT DRO >C28-C36	15.1	10.0	06/24/2023	ND					
Surrogate: 1-Chlorooctane	106 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	125 9	6 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM, LLC KALEI JENNINGS 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	06/23/2023		Sampling Date:	06/20/2023
Reported:	06/27/2023		Sampling Type:	Soil
Project Name:	SEMU PERMIAN		Sampling Condition:	Cool & Intact
Project Number:	03D2057068		Sample Received By:	Shalyn Rodriguez
Project Location:	32.5584,-103.1906			

Sample ID: SW 02 0-4' (H233250-08)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	2.28	114	2.00	2.09	
Toluene*	<0.050	0.050	06/23/2023	ND	2.23	112	2.00	2.59	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.11	105	2.00	1.07	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	6.48	108	6.00	0.241	
Total BTEX	<0.300 0.300		06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID		% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/23/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	173	86.4	200	0.328	
DRO >C10-C28*	<10.0	10.0	06/23/2023	ND	163	81.6	200	0.0809	
EXT DRO >C28-C36	<10.0	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	107 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	105 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



Page 78 of 90

Received by OCD: 7/20/2023 2:24:59 PM

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 11 of 11

Released to Imaging: 10/16/2023 8:41:20 AM

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name	Company Name: Ensolum, LLC					BILL TO						ANALYSIS REQUEST			
Project Manage			1				P.0	. #:				Γ		*	
Address: 60	North M	lariend field	1				Con	Company: Ensolvm							
City: Midle		State: TX		79	701		Attr	11	alei	-	inas			0	
Phone #: 817	- 683-2503	Fax #:					Add	ress:	: 60	N. M	ariendfilli	K		500	
Project #: 03		Project Owne	r: E	isolum	\ \		City	: M	id					1	
Project Name:	SEMU Permia	n					Stat			Zip: 79	701	1			
Project Location	: 32.5584, -	103.1906		1			Pho	ne #:		517-65	a land data	2	20	8	
Sampler Name:	20				1		Fax	#:		<u>, , , , , , , , , , , , , , , , , , , </u>		8015	80	CP	
FOR LAB USE ONLY		1997 18 - 199	II	T	MAT	RIX	F	PRESE	ERV.	SAM	PLING				
1 N 1		1. 1. 1. 1.	(C)OMP.	x					1					ich	
	Complet D	Depth	(G)RAB OR (C)C	GROUNDWATER	H			. /	1			Hd	3	Moride	
Lab I.D.	Sample I.D.	(feet)	3 OR	MON	AVA	Ш		SASE			and the second	2	8	- 4	
1177777)RAI	noz	SOIL	OIL	OTHER :	ACID/BASE	OTHER		1	1			
HZ33250	FSOI	11	C (G)RAB OR	10	N N	SLU	0	11.0	ò	DATE	TIME	Y	X	X	
Z	F502	41	CI		X	-		X		6120123	1320	X	~	X	
3	FS03	U'	C		X	-				(/26/12	1325		1		
4	FSOY	UI UI	C		+	+				6/20/23	1327				
5	F505	ų'	C					++		6/20/23	1330	1		11	
6	PSOG	4'	C		11					6/20/23			1	1	
7	SWOI	0~4'	C.		1					6/20/33	1335		1	1	
8	SWOZ	0-4'	C		V			4		6/20/23	1339	V	Y		
	Denne On Koth Edda and K														
analyses. All claims including	Damages. Cardinal's liability and clin those for negligence and any other dinal be liable for incidental or conse	cause whatsoever shall be d	leemed wa	ived unless	made in w	riting and	d received	f by Card	linal wit	thin 30 days after	completion of th	e applicabl	e		
affiliates or successors arisin Relinguished By	out of or related to the performance	of services hereunder by Ca	ardinal, reg	ardless of	whether su	ch claim	is based u	e, or loss upon any	of the	above stated rea	isons or otherwis	е.			
Reiniquistied by	+ Ditte	Date: 6/2012	Rece	ived B	y.	11	,	1			Verbal Res All Results	are em	I Yes	Please	provide Email address:
and	- 12am	Time: 607	7	n	U	K	X	/			kjenn	ingse	ven	çolu	m. com
Relinquished By		Date:	Rece	ived B	y:		0			.1	REMARKS	s: *	Cus	ston	ner changed to 4500
Thor	X Re/	Time:	5	sto	oll	er	qu	N	L	4					6/23/23
Delivered By: (Cir	cle One) Ob	served Temp. °C	4:	Sa	mple C		on			ED BY:	Turnaroun	d Time:		Standa	ard D Bacteria (only) Sample Condition
Sampler - UPS - E		rroctod Tomp. °C		F	Yes	Yes	5	0	Initia	_	Thermomete	er ID #1		Rush	Cool Intact Observed Temp. °C
FUKW-UUD I	C3.2 10/07/21	-	J-d-		No	No		-0	K	_	Correction F	actor -0	.5°C		No No Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



APPENDIX D

NMOCD Notifications

Released to Imaging: 10/16/2023 8:41:20 AM

From:	Nobui, Jennifer, EMNRD
То:	Kalei Jennings
Cc:	Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD; Hamlet, Robert, EMNRD
Subject:	FW: [EXTERNAL] Maverick Permian- Extension Request- SEMU Permian Battery (Incident Number NAPP2303271574)
Date:	Wednesday, April 19, 2023 1:17:32 PM
Attachments:	image001.png image002.png image003.png image004.png

[**EXTERNAL EMAIL**]

Hello Kalei

OCD approves your 90-day extension request to July 31, 2023 to submit a remediation plan or closure report. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks, Jennifer Nobui

From: Kalei Jennings <<u>kjennings@ensolum.com</u>>
Sent: Monday, April 10, 2023 8:54 AM
To: Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Subject: [EXTERNAL] Maverick Permian- Extension Request- SEMU Permian Battery (Incident
Number NAPP2303271574)

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

To Whom It May Concern,

SEMU Permian Battery (Incident Number NAPP2303271574)

Maverick Permian, LLC (Maverick) is requesting an extension for the current deadline of April 10, 2023, for submitting a report required in 19.15.29.12.B.(1) NMAC detailing remedial actions at the SEMU Permian Battery (Incident Number NAPP2303271574). On January 10, 2023, corrosion on a flowline caused a produced water and crude oil release onto the pasture at the Site. Initial site assessment activities have been completed. Based on the most recent field screening results, it has been determined that additional excavation activities are warranted. Pending field findings and analytical results, further excavation or other remedial mitigation(s) may be warranted. To complete additional sampling activities, excavate additional impacts if identified, and submit a remediation work plan or closure report, Maverick requests a 90-day extension of this deadline until July 9, 2023.

Thank you,



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



APPENDIX E

Final C-141

Released to Imaging: 10/16/2023 8:41:20 AM

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

_)

Page 83 bf 90

Incident ID	NAPP2303271574
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Maverick Permian, LLC	OGRID: 331199
Contact Name: Bryce Wagoner	Contact Telephone: 928-241-1862
Contact email: <u>Bryce.Wagoner@mavresources.com</u>	Incident # (assigned by OCD) NAPP2303271574
Contact mailing address:	
1410 NW County Road Hobbs, NM 88240	

Location of Release Source

Latitude 32.5584____

Longitude -103.1906____

(NAD 83 in decimal degrees to 5 decimal places)

Site Name SEMU Permian Battery	Site Type
Date Release Discovered January 10, 2023	API# (if applicable) 30-205-26334

Unit Letter	Section	Section Township Range		County		
K	19	20 S	38 E	Lea		

Surface Owner: State Federal Tribal Private (Name: _____

Nature and Volume of Release

Materi	al(s) Released (Select all that apply and attach calculations or specifi	ic justification for the volumes provided below)
Crude Oil	Volume Released (bbls) 3.68 bbls	Volume Recovered (bbls) 0
Produced Water	Volume Released (bbls) 0.92 bbls	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ⊠ No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was caused by internal corrosion on a flow line. The release occurred off pad. The source of the release has been stopped and the impacted area has been secured.

Application ID

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
🗌 Yes 🖾 No	
If YES, was immediate ne	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 \square The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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.

Permian HSE Specialist II
Date:1/19/2023
Telephone: 928-241-1862
Date: 02/02/2023

Form C-141	
Page 2	

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

	Subsurface Fluids									
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) *10% in consolidated sediments after rain to 50% in sand with no precipitation	Oil-Water Ratio (%)	Area (ft²)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	38.0	25.0	2.0	0.1	0.80	950.0	28.2	2.8	2.25	0.6
Rectangle B	43.0	28.0	1.0	0.1	0.80	1204.0	17.9	1.8	1.43	0.4
Rectangle C						0.0	0.0	0.0	0.00	0.0
Rectangle D						0.0	0.0	0.0	0.00	0.0
Rectangle E						0.0	0.0	0.0	0.00	0.0
Rectangle F						0.0	0.0	0.0	0.00	0.0
Rectangle G						0.0	0.0	0.0	0.00	0.0
Rectangle H						0.0	0.0	0.0	0.00	0.0
Rectangle I						0.0	0.0	0.0	0.00	0.0
Rectangle J						0.0	0.0	0.0	0.00	0.0
	Total Volume (bbls): 4.60 3.68 0.92								0.92	

TOTAL RELEASE VOLUME (bbls): 4.6

Γ

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

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

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

District IV

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

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	181859
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
jharimon	None	2/2/2023

Page:86 6690

Action 181859

Received by OCD: 7/20/2023 2:24:59 PM Form C-141 State of New Mexico

Page 3

Oil Conservation Division

	Page 87 of 90
Incident ID	NAPP2303271574
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?	<u>51-100 (ft bgs)</u>
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas not on an exploration, development, production, or storage site?	🖂 Yes 🗌 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- \square Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- \boxtimes Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- \boxtimes 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: 7/20/2	2023 2:24:59 PM State of New Mexico			Page 88 of 90
			Incident ID	NAPP2303271574
Page 4 Oil Conservation Divisio	on	District RP		
			Facility ID	
			Application ID	
regulations all operators a public health or the enviro failed to adequately invest addition, OCD acceptance and/or regulations. Printed Name:Bryc Signature:	formation given above is true and complete to the release of release required to report and/or file certain release of a C-141 report by the tigate and remediate contamination that pose a the of a C-141 report does not relieve the operator between the operator of a C-141 report does not relieve the operator between the operator of a C-141 report does not relieve the operator between the operator operator of a C-141 report does not relieve the operator between the operator ope	notifications and perform co ne OCD does not relieve the threat to groundwater, surfa of responsibility for compl Title:Permian HSE Date:07/20/2023	orrective actions for rele e operator of liability she ce water, human health liance with any other fee Specialist II	ases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only Received by: _ Shelly V	Wells	Date: <u>7/20/2</u>	2023	

Page 6

Oil Conservation Division

Incident ID	NAPP2303271574
District RP	
Facility ID	
Application ID	

Page 89 of 90

Closure

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

<u>Closure Report Attachment Checklist</u>: Each of the following a	items must be included in the closure report.
\boxtimes A scaled site and sampling diagram as described in 19.15.29.	11 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate OD	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re human health or the environment. In addition, OCD acceptance of	ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in DCD when reclamation and re-vegetation are complete. Title:Permian HSE Specialist II Date:07/20/2023
OCD Only	
Received by: <u>Shelly Wells</u>	Date: <u>7/20/2023</u>
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible for regulations.
Closure Approved by: <u>Nelson Velez</u>	Date: <u>10/16/2023</u>
Printed Name: Nelson Velez	Title:Environmental Specialist – Adv
Operator did not meet 19.15.29.12D (1a) NMAC. Forbe resolved.	arance given on 09/27/2023 (App ID #: 236326). 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

District IV

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

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

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC	331199
1000 Main Street, Suite 2900	Action Number:
Houston, TX 77002	242773
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Operator did not meet 19.15.29.12D (1a) NMAC. Forbearance given on 09/27/2023 (App ID #: 236326). Release resolved.	10/16/2023

Action 242773