ENSOLUM

December 14, 2022

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

Re: Revised Remediation Work Plan
East Vacuum Grayburg – San Andreas Unit #010
Incident Number NAPP2221675703
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Natural Resources, LLC (Maverick), has prepared the following *Revised Remediation Work Plan* (RRWP) to document assessment and soil sampling activities completed to date and propsal to excavate the extent if impacted soil at the East Vacuum Grayburg – San Andreas Unit #010 (Site), resulting from a flow line release of crude oil and produced water into the surrounding pasture. The following RRWP proposes excavation of impacted soil in the top 4 feet located in the pasture.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 28, Township 17 South, Range 35 East, in Lea County, New Mexico (32.80302° N, 103.45896° W) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On June 6, 2022, a hole in a poly flowline resulted in the release of approximately 35 barrels (bbls) of produced water and 2 bbls of crude oil into the pasture where fluids pooled. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 19 bbls of produced water and 1 bbl of crude oil 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 June 6, 2022. The release was assigned Incident Number NAPP2221675703.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Based on the results of the Site Characterization presented in the September 2, 2022 Remediation Work Plan (RWP), which was approved by NMOCD, 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 applies 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 August 2, 2022, personnel completed a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations. Five preliminary soil samples (SS01 through SS05) were collected within the release extent at a depth of approximately 0.5 feet bgs. The preliminary soil samples were field screened for volatile aromatic hydrocarbons utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix A.

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

Laboratory analytical results for preliminary soil sample SS01 indicated TPH-GRO/TPH-DRO, TPH, and chloride concentrations exceeded the Site Closure Criteria. Laboratory analytical results for preliminary soil samples SS02 through SS05 indicated all COCs concentrations were compliant with the Site Closure Criteria; however, laboratory analytical results for SS01 through SS05 did indicate TPH and chloride concentrations exceeded the reclamation requirements. The laboratory analytical reports are included in Appendix B.

Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation activities appeared to be warranted to define the vertical and lateral extents of impacts to soil following the June 2022 release.

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between October 24 and 25, 2022, delineation activities were conducted at the Site to assess the vertical and lateral extent of impacted soil. Potholes PH01 through PH09 were advanced via backhoe within and around the release extent. The delineation potholes were advanced to a depth of 8 feet bgs. Discrete delineation soil samples were collected from each pothole at depths ranging from 1-foot to 8 feet bgs based on highest field screening results and the terminus of each pothole. Soil from the potholes was field screened for VOCs and chloride. Field screening results and observations for the potholes were logged on lithologic/ soil sampling logs, which are included in Appendix C. The delineation soil samples

were handled and analyzed as described above. The delineation soil samples locations are depicted on Figure 3.

Laboratory analytical results for delineation soil samples PH01 through PH05, collected from within the release extent, indicated TPH and/or chloride concentrations exceeded the Site Closure Criteria and/or the reclamation requirement at a maximum depth of 4 feet bgs. Laboratory analytical results for delineation soil samples collected from potholes PH06 through PH09, at depths ranging from 1-foot to 8 feet bgs, indicated all COC concentrations were compliant with the most stringest Table I Closure Criteria and successfully defined the lateral extent of the release. Table 1 summarizes soil analytical results. The laboratory analytical reports are included in Appendix B.

PROPOSED REMEDIATION WORK PLAN

Impacted soil has been detected in the top 4 feet of soil off pad as indicated by preliminary surface samples SS01 through SS05 and in the vicinity of potholes PH01 through PH05 at depths ranging from 1-foot to 2 feet bgs. As a result, Maverick proposes excavation of impacted soil in the top 4 feet.

Maverick requests approval to complete the following remediation activities:

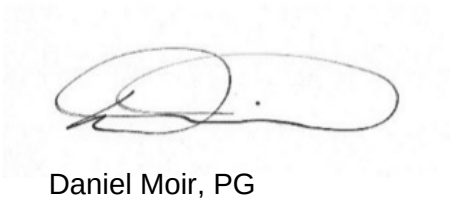
- Excavation of TPH and/or chloride impacted and waste-containing soil in the top 4 feet of the pasture. Excavation will proceed laterally until sidewall samples indicated TPH and chloride concentrations are compliant with the reclamation requirements. Confirmation samples will be collected from the sidewalls of the final excavation extent.
- Due to the estimated 9,200 square foot size of the excavation, Maverick requests a variance for frequency of excavation confirmation samples. Maverick proposes the frequency of confirmation sampling for the excavation floor to be decreased from every 200 square feet (approximately 46 samples) to every 400 square feet (approximately 23 samples). Each 5-point composite floor sample will represent a 400 square foot area. Sidewall samples will be collected at a frequency of every 400 square feet. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation confirmation samples will be analyzed for BTEX, TPH, and chloride.
- An estimated 950 cubic yards of impacted/waste-containing soil will be excavated and disposed of at a licensed disposal facility.
- The excavation will be backfilled and recontoured to match pre-existing conditions. The disturbed pasture will be re-seeded with an approved Bureau of Land Management (BLM) seed mixture.

Maverick will complete the excavation activities within 90 days of the date of approval of this RRWP by the NMOCD. A report detailing remedial action will be submitted within 30 days of receipt of laboratory analytical results. Maverick believes the scope of work described above will meet requirements set forth in 19.15.29.12 and 13 NMAC and are protective of human health, the environment, and groundwater. As such, Maverick respectfully requests approval of this RRWP from NMOCD.

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

Sincerely,
Ensolum, LLC

Kalei Jennings
Senior Scientist



Daniel Moir, PG
Senior Managing Geologist

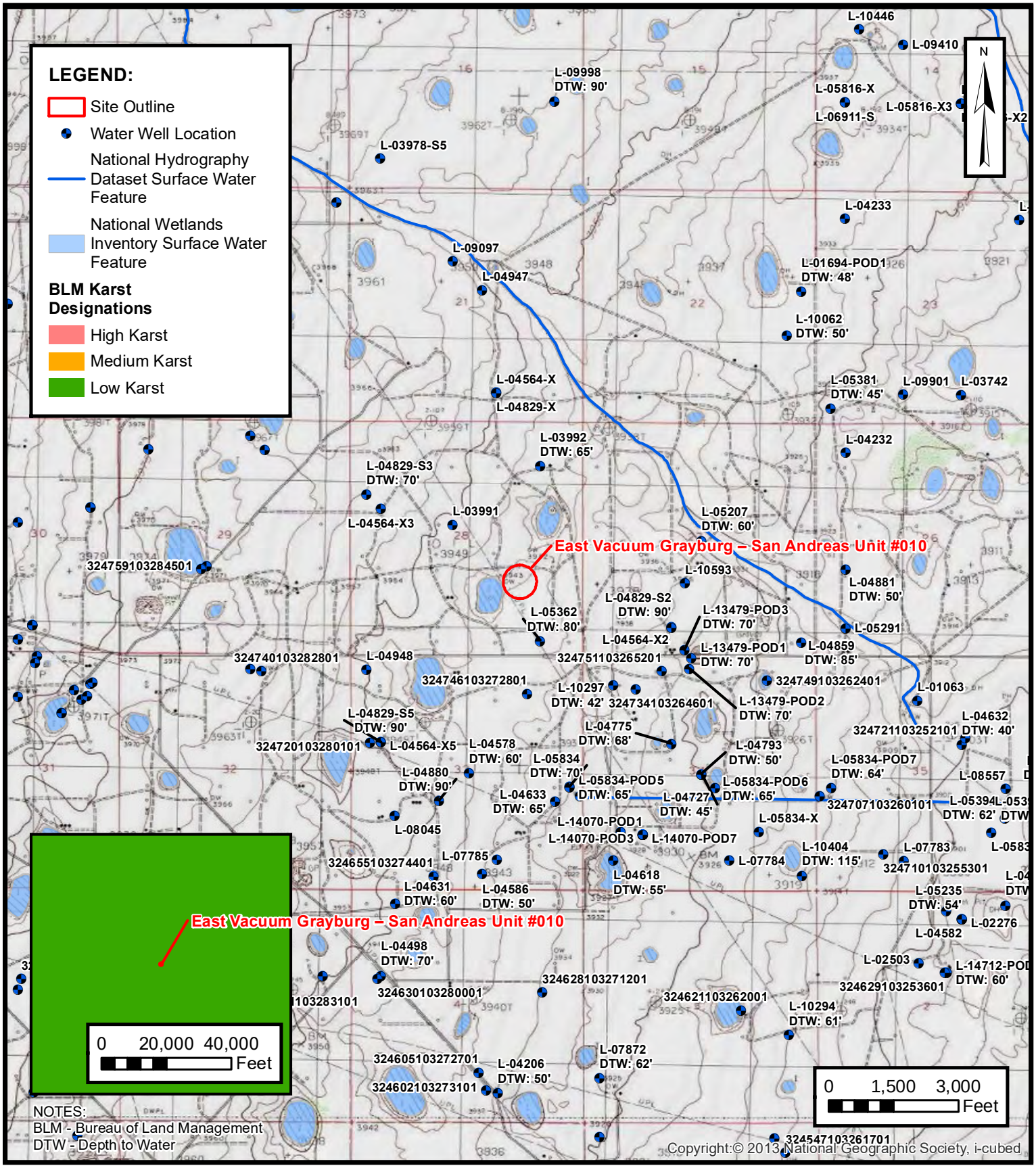
cc: Bryce Wagoner, Maverick Natural Resources, LLC
New Mexico State Land Office

Appendices:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Photographic Log
Appendix B	Laboratory Analytical Results
Appendix C	Lithologic / Sampling Logs
Appendix D	NMOCD Notifications
Appendix E	Final C-141

ENSOLUM

FIGURES

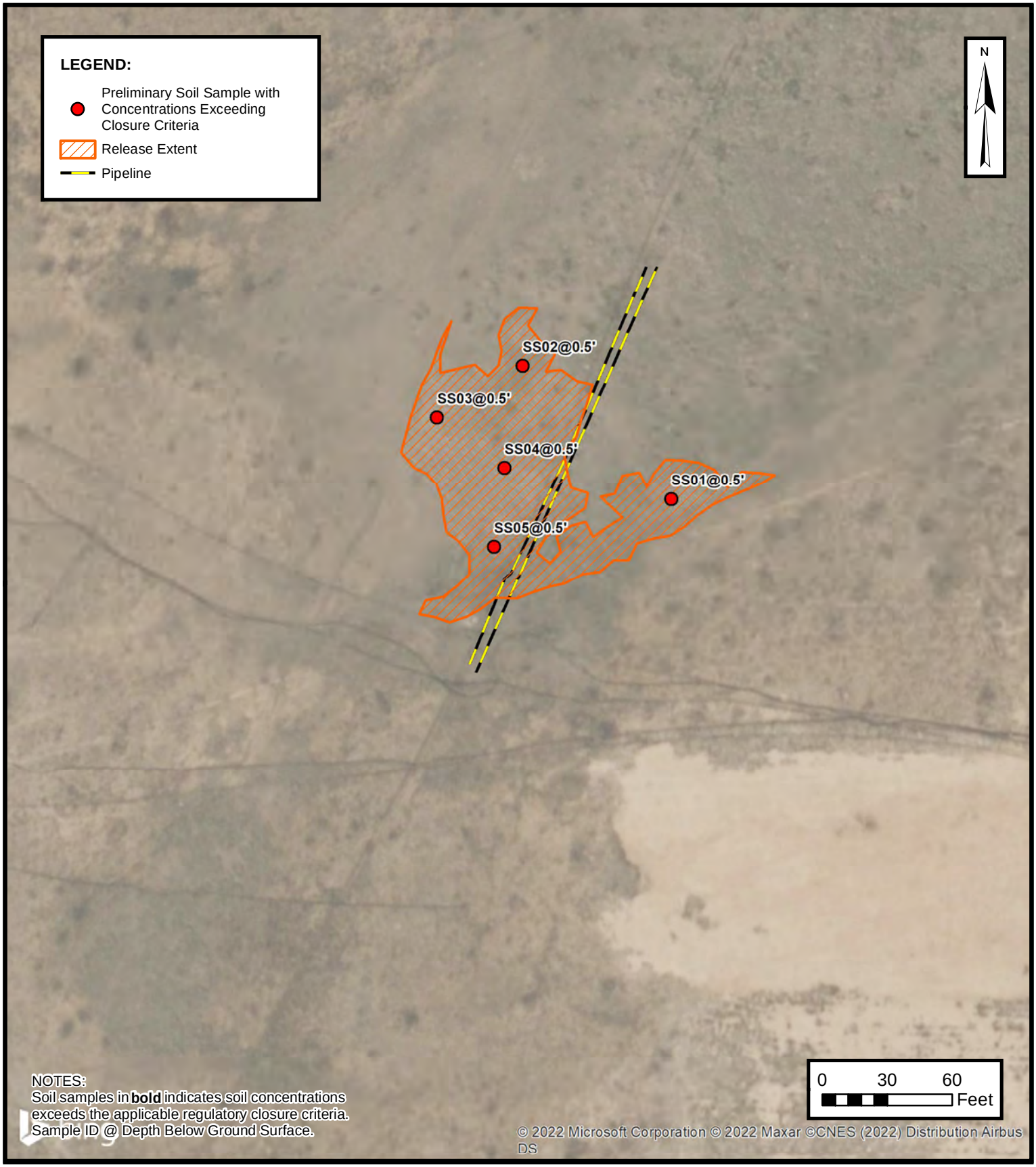


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

SITE RECEPTOR MAP

MAVERICK NATURAL RESOURCES, LLC
EAST VACUUM GRAYBURG – SAN ANDREAS UNIT #010
NAPP2221675703
Unit E
Lea County, New Mexico

FIGURE
1



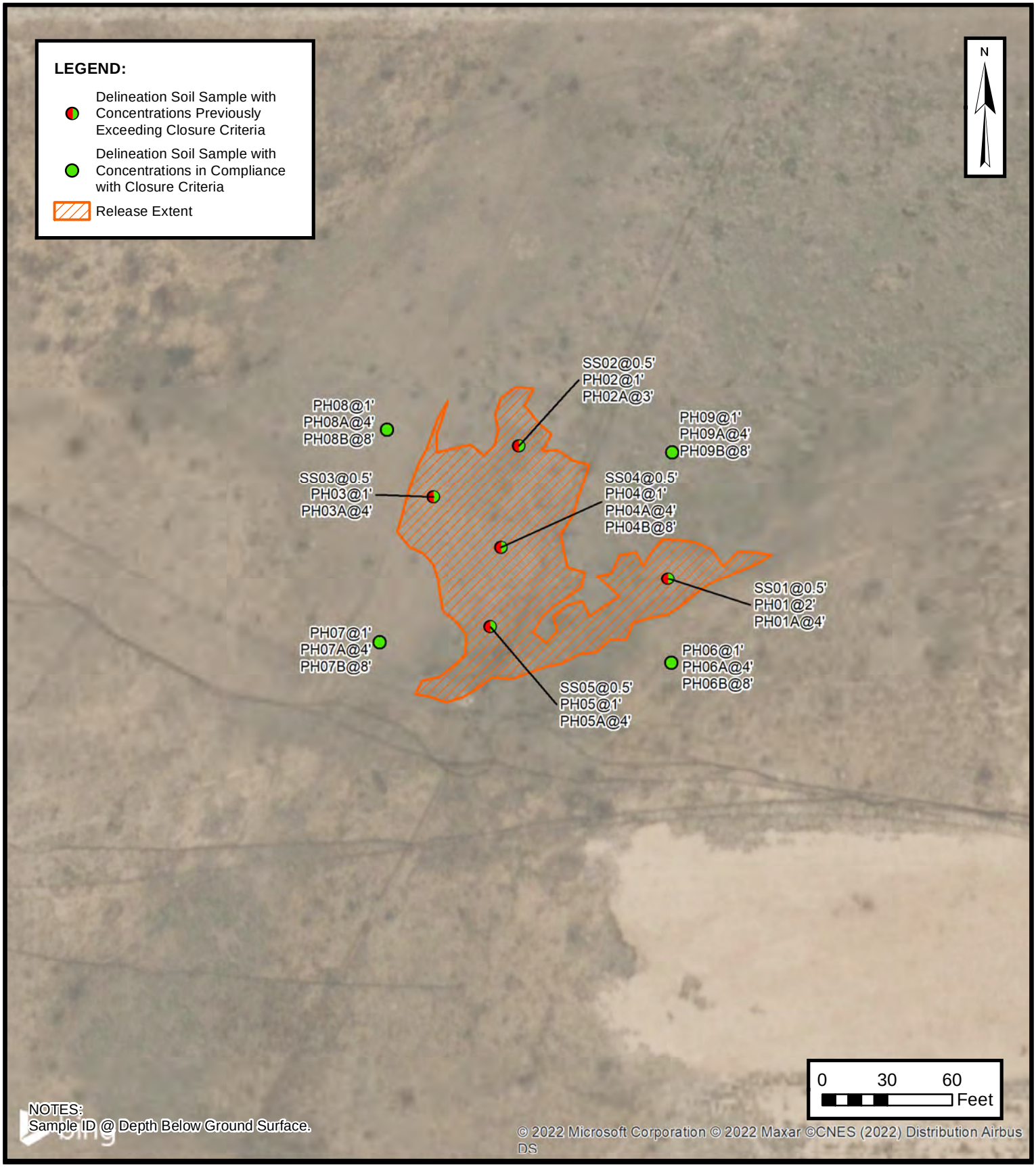
NOTES:
Soil samples in **bold** indicates soil concentrations exceeds the applicable regulatory closure criteria.
Sample ID @ Depth Below Ground Surface.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

PRELIMINARY SOIL SAMPLE LOCATIONS

MAVERICK NATURAL RESOURCES, LLC
EAST VACUUM GRAYBURG - SAN ANDREAS UNIT #010
NAPP2221675703
Unit , Sec 28, T17S, R35E
Lea County, New Mexico

FIGURE
2



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

DELINEATION SOIL SAMPLE LOCATIONS

MAVERICK U E U CE LLC
EAST VACUUM GRAYBURG - SAN ANDREAS UNIT #010
NAPP2221675703
Unit , Sec 28, T17S, R35E
Lea County, New Mexico

FIGURE

3

ENSOLUM

TABLES

Released to Imaging: 1/11/2023 1:59:45 PM

Received by OCD: 12/14/2022 7:53:02 PM

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
East Vacuum Grayburg - San Andreas Unit #010
Maverick Natural Resources, LLC
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Preliminary Assessment Soil Samples										
SS01	08/02/2022	0.5	<0.00199	<0.00398	<50.0	3,590	405	**3,590**	**4,000**	**10,600***
SS02	08/02/2022	0.5	<0.00198	<0.00397	<49.9	608	81.6	608	690	9,440*
SS03	08/02/2022	0.5	<0.00202	<0.00403	<49.9	92.0	<49.9	92.0	92.0	7,310*
SS04	08/02/2022	0.5	<0.00200	<0.00401	<50.0	237	<50.0	237	237	8,390*
SS05	08/02/2022	0.5	<0.00200	<0.00400	<50.0	179	<50.0	179	179	7,850*
Delineation Soil Samples										
PH01	10/24/2022	2	<0.00198	<0.00396	<50.0	327	<50.0	327	327	4,030*
PH01A	10/24/2022	4	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	66.6
PH02	10/24/2022	1	<0.00200	<0.00400	<50.0	236	<50.0	236	236	6,240*
PH02A	10/24/2022	3	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	196
PH03	10/24/2022	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	**10,400***
PH03A	10/24/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,350
PH04	10/24/2022	1	<0.00202	<0.00403	<49.8	861	138	861	999	**10,600***
PH04A	10/24/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,480
PH04B	10/25/2022	8	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	75.3
PH05	10/24/2022	1	<0.00201	<0.00402	<49.8	80.1	<49.8	80.1	80.1	2,820*
PH05A	10/24/2022	4	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	55.6
PH06	10/25/2022	1	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	29.0*
PH06A	10/25/2022	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	23.8
PH06B	10/25/2022	8	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	18.0
PH07	10/25/2022	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	36.4
PH07A	10/25/2022	4	<0.00200	<0.0399	<49.9	<49.9	<49.9	<49.9	<49.9	15.3
PH07B	10/25/2022	8	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	38.7
PH08	10/25/2022	1	<0.00199	<0.00398	<49.9	56.0	<49.9	56.0	56.0	73.0*
PH08A	10/25/2022	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	20.8
PH08B	10/25/2022	8	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	20.2
PH09	10/25/2022	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	35.5*
PH09A	10/25/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	415
PH09B	10/25/2022	8	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	192

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
* indicates sample was collected in area to be reclaimed after remediation is complete; reclamation standard for chloride in the top 4 feet is 600 mg/kg

ENSOLUM

APPENDIX

Photographic Log

ENSOLUM

Photographic Log
Maverick Natural Resources, LLC
East Vacuum Grayburg - San Andres Unit #010
Incident Number NAPP2221675703

Photograph 1 Date: August 2, 2022

Description: Photo of initial release extent, facing northeast.

Photograph 2 Date: August 2, 2022

Description: Photo of initial release extent, facing northeast.

Photograph 3 Date: August 2, 2022

Description: Photo of initial release extent, facing southeast.

Photograph 4 Date: August 2, 2022

Description: Photo of initial release extent, facing southwest.

ENSOLUM

Photographic Log
Maverick Natural Resources, LLC
East Vacuum Grayburg - San Andres Unit #010
Incident Number NAPP2221675703

Photograph 5 Date: Oct. 25, 2022
Description: Photo of pothole PH07, facing southwest.

Photograph 6 Date: Oct. 25, 2022
Description: Photo of pothole PH08, facing east.

Photograph 7 Date: Oct. 25, 2022
Description: Photo of release extent, post delineation, facing west.

Photograph 8 Date: Oct. 25, 2022
Description: Photo of release extent, post delineation, facing northeast.

ENSOLUM

APPENDIX B

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3289-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSAU 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
11/1/2022 1:10:05 PM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSAU 2801

Laboratory Job ID: 890-3289-1
SDG: 03D2057020

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Job ID: 890-3289-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3289-1

Receipt
The samples were received on 10/25/2022 3:17 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-3289-1) and PH01 (890-3289-2).

GC VOA
Method 8021B: The following sample was diluted due to the nature of the sample matrix: (890-3287-A-1-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Client Sample ID: PH01

Date Collected: 10/24/22 10:30
Date Received: 10/25/22 15:17
Sample Depth: 2

Lab Sample ID: 890-3289-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/30/22 16:11	10/31/22 19:27	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/30/22 16:11	10/31/22 19:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/30/22 16:11	10/31/22 19:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/30/22 16:11	10/31/22 19:27	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/30/22 16:11	10/31/22 19:27	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/30/22 16:11	10/31/22 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*10/30/22 16:11*	*10/31/22 19:27*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*10/28/22 13:58*	*11/01/22 05:19*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*10/30/22 16:11*	*10/31/22 19:27*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*10/28/22 13:58*	*11/01/22 05:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**327**		50.0		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 02:16	1
Diesel Range Organics (Over C10-C28)	**327**		50.0		mg/Kg		10/27/22 13:56	10/30/22 02:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*10/27/22 13:56*	*10/30/22 02:16*	*1*
o-Terphenyl	*111*		*70 - 130*	*10/27/22 13:56*	*10/30/22 02:16*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4030**		25.1		mg/Kg			10/30/22 08:54	5

Client Sample ID: PH01

Date Collected: 10/24/22 10:40
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3289-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/30/22 16:11	10/31/22 19:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/30/22 16:11	10/31/22 19:47	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/30/22 16:11	10/31/22 19:47	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/30/22 16:11	10/31/22 19:47	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/30/22 16:11	10/31/22 19:47	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/30/22 16:11	10/31/22 19:47	1

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Client Sample ID: PH01

Date Collected: 10/24/22 10:40
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3289-2

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/30/22 16:11*	*10/31/22 19:47*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*10/28/22 13:58*	*11/01/22 05:40*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/30/22 16:11*	*10/31/22 19:47*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*10/28/22 13:58*	*11/01/22 05:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/30/22 02:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/30/22 02:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/30/22 02:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*87*		*70 - 130*	*10/27/22 13:56*	*10/30/22 02:37*	*1*
o-Terphenyl	*101*		*70 - 130*	*10/27/22 13:56*	*10/30/22 02:37*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66.6**		4.95	mg/Kg			10/30/22 09:00	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20914-A-2-C MS	Matrix Spike	84	100
880-20914-A-2-D MSD	Matrix Spike Duplicate	85	99
890-3287-A-1-C MS	Matrix Spike	89	102
890-3287-A-1-D MSD	Matrix Spike Duplicate	108	101
890-3289-1	PH01	105	98
890-3289-1	PH01	92	95
890-3289-2	PH01	96	100
890-3289-2	PH01	97	98
LCS 880-38105/1-A	Lab Control Sample	94	97
LCS 880-38186/1-A	Lab Control Sample	79	92
LCSD 880-38105/2-A	Lab Control Sample Dup	94	97
LCSD 880-38186/2-A	Lab Control Sample Dup	78	91
MB 880-38105/5-A	Method Blank	114	101
MB 880-38186/5-A	Method Blank	110	105

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3285-A-1-C MS	Matrix Spike	76	81
890-3285-A-1-D MSD	Matrix Spike Duplicate	88	89
890-3289-1	PH01	101	111
890-3289-2	PH01	87	101
LCS 880-38023/2-A	Lab Control Sample	105	124
LCSD 880-38023/3-A	Lab Control Sample Dup	103	120
MB 880-38023/1-A	Method Blank	79	91

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38105/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38105

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*

Lab Sample ID: LCS 880-38105/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1009		mg/Kg		101	70 - 130		
Toluene			0.100	0.1041		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09677		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1987		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.1054		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-38105/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09314		mg/Kg		93	70 - 130	8	35
Toluene			0.100	0.09973		mg/Kg		100	70 - 130	4	35
Ethylbenzene			0.100	0.08607		mg/Kg		86	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.1738		mg/Kg		87	70 - 130	13	35
o-Xylene			0.100	0.09058		mg/Kg		91	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3287-A-1-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F1	0.0996	0.09465		mg/Kg		95	70 - 130		
Toluene	<0.00201	U F1	0.0996	0.09684		mg/Kg		97	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

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

Lab Sample ID: 890-3287-A-1-C MS | **Client Sample ID: Matrix Spike**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 38212 | **Prep Batch: 38105**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.0996	0.08320		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1658		mg/Kg		83	70 - 130
o-Xylene	<0.00201	U F1	0.0996	0.08570		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-3287-A-1-D MSD | **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 38212 | **Prep Batch: 38105**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	<0.00398	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-38186/5-A | **Client Sample ID: Method Blank**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 38212 | **Prep Batch: 38186**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*

Lab Sample ID: LCS 880-38186/1-A | **Client Sample ID: Lab Control Sample**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 38212 | **Prep Batch: 38186**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09449		mg/Kg		94	70 - 130
Toluene	0.100	0.1036		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.09290		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1873		mg/Kg		94	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

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

Lab Sample ID: LCS 880-38186/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38186

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09541		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-38186/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38186

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08977		mg/Kg		90	70 - 130	5	35
Toluene			0.100	0.09741		mg/Kg		97	70 - 130	6	35
Ethylbenzene			0.100	0.08724		mg/Kg		87	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1757		mg/Kg		88	70 - 130	6	35
o-Xylene			0.100	0.09083		mg/Kg		91	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 880-20914-A-2-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.09329		mg/Kg		93	70 - 130		
Toluene	<0.00199	U	0.101	0.09323		mg/Kg		92	70 - 130		
Ethylbenzene	<0.00199	U	0.101	0.08300		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1664		mg/Kg		82	70 - 130		
o-Xylene	<0.00199	U	0.101	0.08979		mg/Kg		89	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-20914-A-2-D MSD
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.08222		mg/Kg		83	70 - 130	13	35
Toluene	<0.00199	U	0.0994	0.08174		mg/Kg		82	70 - 130	13	35
Ethylbenzene	<0.00199	U	0.0994	0.07245		mg/Kg		73	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1450		mg/Kg		72	70 - 130	14	35
o-Xylene	<0.00199	U	0.0994	0.07980		mg/Kg		80	70 - 130	12	35

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

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

Lab Sample ID: 880-20914-A-2-D MSD
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38186

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

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

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130	10/27/22 13:56	10/29/22 21:37	1
o-Terphenyl	91		70 - 130	10/27/22 13:56	10/29/22 21:37	1

Lab Sample ID: LCS 880-38023/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.8		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	748.0		mg/Kg		75	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: LCSD 880-38023/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	784.5		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	738.0		mg/Kg		74	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	120		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

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

Lab Sample ID: 890-3285-A-1-C MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	927.7		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	80.1		998	808.7		mg/Kg		73	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*76*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

Lab Sample ID: 890-3285-A-1-D MSD
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.7		mg/Kg		80	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	80.1		998	921.4		mg/Kg		84	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38007/1-A
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/30/22 08:00	1

Lab Sample ID: LCS 880-38007/2-A
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	263.5		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-38007/3-A
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	264.0		mg/Kg		106	90 - 110	0	20

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3286-A-1-B MS
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	10600		5030	15700		mg/Kg		101	90 - 110		

Lab Sample ID: 890-3286-A-1-C MSD
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10600		5030	15700		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

GC VOA

Prep Batch: 38105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Total/NA	Solid	5035	
890-3289-2	PH01	Total/NA	Solid	5035	
MB 880-38105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3287-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3287-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 38186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Total/NA	Solid	5035	
890-3289-2	PH01	Total/NA	Solid	5035	
MB 880-38186/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38186/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38186/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20914-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-20914-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Total/NA	Solid	8021B	38186
890-3289-1	PH01	Total/NA	Solid	8021B	38105
890-3289-2	PH01	Total/NA	Solid	8021B	38186
890-3289-2	PH01	Total/NA	Solid	8021B	38105
MB 880-38105/5-A	Method Blank	Total/NA	Solid	8021B	38105
MB 880-38186/5-A	Method Blank	Total/NA	Solid	8021B	38186
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	8021B	38105
LCS 880-38186/1-A	Lab Control Sample	Total/NA	Solid	8021B	38186
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38105
LCSD 880-38186/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38186
880-20914-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	38186
880-20914-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38186
890-3287-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	38105
890-3287-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38105

Analysis Batch: 38353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Total/NA	Solid	Total BTEX	
890-3289-2	PH01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Total/NA	Solid	8015NM Prep	
890-3289-2	PH01	Total/NA	Solid	8015NM Prep	
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

GC Semi VOA

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Total/NA	Solid	8015B NM	38023
890-3289-2	PH01	Total/NA	Solid	8015B NM	38023
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015B NM	38023
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38023
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38023
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38023
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38023

Analysis Batch: 38289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Total/NA	Solid	8015 NM	
890-3289-2	PH01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Soluble	Solid	DI Leach	
890-3289-2	PH01	Soluble	Solid	DI Leach	
MB 880-38007/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38007/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38007/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3286-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3286-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3289-1	PH01	Soluble	Solid	300.0	38007
890-3289-2	PH01	Soluble	Solid	300.0	38007
MB 880-38007/1-A	Method Blank	Soluble	Solid	300.0	38007
LCS 880-38007/2-A	Lab Control Sample	Soluble	Solid	300.0	38007
LCSD 880-38007/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38007
890-3286-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	38007
890-3286-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38007

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Client Sample ID: PH01

Date Collected: 10/24/22 10:30
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3289-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 19:27	MNR	EET MID
Total/NA	Prep	5035			5.05 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 05:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38353	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38289	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 02:16	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	38007	10/27/22 11:23	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38166	10/30/22 08:54	CH	EET MID

Client Sample ID: PH01

Date Collected: 10/24/22 10:40
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3289-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 19:47	MNR	EET MID
Total/NA	Prep	5035			5.03 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 05:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38353	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38289	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 02:37	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38007	10/27/22 11:23	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38166	10/30/22 09:00	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3289-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3289-1	PH01	Solid	10/24/22 10:30	10/25/22 15:17	2
890-3289-2	PH01	Solid	10/24/22 10:40	10/25/22 15:17	4

Page 34 of 225

11/1/2022

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057020	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TN007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.4

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021
PH01	S	10.24.22	1030	2'	G	1		X	X	X
PH01	S	10.24.22	1040	4'	G	1		X	X	X

890-3289 Chain of Custody

Sample Comments

Incident Number
NAPP2221675703

10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.25.22 1547	4		
3			6		
5					

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

Page 20 of 22

Received by OCD: 12/14/2022 7:53:02 PM

Released to Imaging: 1/11/2023 1:59:45 PM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3289-1
SDG Number: 03D2057020

Login Number: 3289
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3289-1
SDG Number: 03D2057020

Login Number: 3289
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3288-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSAU 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
11/1/2022 1:09:48 PM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSAU 2801

Laboratory Job ID: 890-3288-1
SDG: 03D2057020

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Job ID: 890-3288-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3288-1

Receipt
The samples were received on 10/25/2022 3:17 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH02 (890-3288-1) and PH02 (890-3288-2).

GC VOA
Method 8021B: The following sample was diluted due to the nature of the sample matrix: (890-3287-A-1-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Client Sample ID: PH02

Date Collected: 10/24/22 13:00
Date Received: 10/25/22 15:17
Sample Depth: 1

Lab Sample ID: 890-3288-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 18:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 18:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 18:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/30/22 16:11	10/31/22 18:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 18:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/30/22 16:11	10/31/22 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*10/30/22 16:11*	*10/31/22 18:46*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*10/28/22 13:58*	*11/01/22 01:07*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*10/30/22 16:11*	*10/31/22 18:46*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*10/28/22 13:58*	*11/01/22 01:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**236**		50.0		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 01:33	1
Diesel Range Organics (Over C10-C28)	**236**		50.0		mg/Kg		10/27/22 13:56	10/30/22 01:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/27/22 13:56*	*10/30/22 01:33*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/27/22 13:56*	*10/30/22 01:33*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6240**		49.5		mg/Kg			10/30/22 15:38	10

Client Sample ID: PH02

Date Collected: 10/24/22 13:10
Date Received: 10/25/22 15:17
Sample Depth: 3

Lab Sample ID: 890-3288-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/30/22 16:11	10/31/22 19:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/30/22 16:11	10/31/22 19:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/30/22 16:11	10/31/22 19:07	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/30/22 16:11	10/31/22 19:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/30/22 16:11	10/31/22 19:07	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/30/22 16:11	10/31/22 19:07	1

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Client Sample ID: PH02

Date Collected: 10/24/22 13:10
Date Received: 10/25/22 15:17
Sample Depth: 3

Lab Sample ID: 890-3288-2

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*10/30/22 16:11*	*10/31/22 19:07*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/28/22 13:58*	*11/01/22 01:27*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*10/30/22 16:11*	*10/31/22 19:07*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*10/28/22 13:58*	*11/01/22 01:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/30/22 01:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/30/22 01:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/30/22 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/27/22 13:56*	*10/30/22 01:54*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/27/22 13:56*	*10/30/22 01:54*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**196**		4.98	mg/Kg			10/30/22 15:44	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20914-A-2-C MS	Matrix Spike	84	100
880-20914-A-2-D MSD	Matrix Spike Duplicate	85	99
890-3287-A-1-C MS	Matrix Spike	89	102
890-3287-A-1-D MSD	Matrix Spike Duplicate	108	101
890-3288-1	PH02	92	99
890-3288-1	PH02	95	96
890-3288-2	PH02	108	93
890-3288-2	PH02	96	93
LCS 880-38105/1-A	Lab Control Sample	94	97
LCS 880-38186/1-A	Lab Control Sample	79	92
LCSD 880-38105/2-A	Lab Control Sample Dup	94	97
LCSD 880-38186/2-A	Lab Control Sample Dup	78	91
MB 880-38105/5-A	Method Blank	114	101
MB 880-38186/5-A	Method Blank	110	105

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3285-A-1-C MS	Matrix Spike	76	81
890-3285-A-1-D MSD	Matrix Spike Duplicate	88	89
890-3288-1	PH02	92	104
890-3288-2	PH02	92	104
LCS 880-38023/2-A	Lab Control Sample	105	124
LCSD 880-38023/3-A	Lab Control Sample Dup	103	120
MB 880-38023/1-A	Method Blank	79	91

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38105/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38105

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*

Lab Sample ID: LCS 880-38105/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1009		mg/Kg		101	70 - 130		
Toluene			0.100	0.1041		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09677		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1987		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.1054		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-38105/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09314		mg/Kg		93	70 - 130	8	35
Toluene			0.100	0.09973		mg/Kg		100	70 - 130	4	35
Ethylbenzene			0.100	0.08607		mg/Kg		86	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.1738		mg/Kg		87	70 - 130	13	35
o-Xylene			0.100	0.09058		mg/Kg		91	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3287-A-1-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F1	0.0996	0.09465		mg/Kg		95	70 - 130		
Toluene	<0.00201	U F1	0.0996	0.09684		mg/Kg		97	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

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

Lab Sample ID: 890-3287-A-1-C MS | **Client Sample ID: Matrix Spike**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 38212 | **Prep Batch: 38105**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.0996	0.08320		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1658		mg/Kg		83	70 - 130
o-Xylene	<0.00201	U F1	0.0996	0.08570		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-3287-A-1-D MSD | **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 38212 | **Prep Batch: 38105**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	<0.00398	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-38186/5-A | **Client Sample ID: Method Blank**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 38212 | **Prep Batch: 38186**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*

Lab Sample ID: LCS 880-38186/1-A | **Client Sample ID: Lab Control Sample**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 38212 | **Prep Batch: 38186**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09449		mg/Kg		94	70 - 130
Toluene	0.100	0.1036		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.09290		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1873		mg/Kg		94	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

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

Lab Sample ID: LCS 880-38186/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38186

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09541		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-38186/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38186

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08977		mg/Kg		90	70 - 130	5	35
Toluene			0.100	0.09741		mg/Kg		97	70 - 130	6	35
Ethylbenzene			0.100	0.08724		mg/Kg		87	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1757		mg/Kg		88	70 - 130	6	35
o-Xylene			0.100	0.09083		mg/Kg		91	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 880-20914-A-2-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.09329		mg/Kg		93	70 - 130		
Toluene	<0.00199	U	0.101	0.09323		mg/Kg		92	70 - 130		
Ethylbenzene	<0.00199	U	0.101	0.08300		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1664		mg/Kg		82	70 - 130		
o-Xylene	<0.00199	U	0.101	0.08979		mg/Kg		89	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-20914-A-2-D MSD
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.08222		mg/Kg		83	70 - 130	13	35
Toluene	<0.00199	U	0.0994	0.08174		mg/Kg		82	70 - 130	13	35
Ethylbenzene	<0.00199	U	0.0994	0.07245		mg/Kg		73	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1450		mg/Kg		72	70 - 130	14	35
o-Xylene	<0.00199	U	0.0994	0.07980		mg/Kg		80	70 - 130	12	35

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

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

Lab Sample ID: 880-20914-A-2-D MSD
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38186

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

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

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130	10/27/22 13:56	10/29/22 21:37	1
o-Terphenyl	91		70 - 130	10/27/22 13:56	10/29/22 21:37	1

Lab Sample ID: LCS 880-38023/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.8		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	748.0		mg/Kg		75	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: LCSD 880-38023/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	784.5		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	738.0		mg/Kg		74	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	120		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

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

Lab Sample ID: 890-3285-A-1-C MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	927.7		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	80.1		998	808.7		mg/Kg		73	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*76*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

Lab Sample ID: 890-3285-A-1-D MSD
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.7		mg/Kg		80	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	80.1		998	921.4		mg/Kg		84	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38010/1-A
Matrix: Solid
Analysis Batch: 38167

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/30/22 12:38	1

Lab Sample ID: LCS 880-38010/2-A
Matrix: Solid
Analysis Batch: 38167

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	267.4		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-38010/3-A
Matrix: Solid
Analysis Batch: 38167

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	268.4		mg/Kg		107	90 - 110	0	20

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-20768-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38167

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	402		248	633.8		mg/Kg		94	90 - 110		

Lab Sample ID: 880-20768-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38167

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	402		248	634.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-20768-A-14-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38167

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2040		1250	3312		mg/Kg		102	90 - 110		

Lab Sample ID: 880-20768-A-14-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38167

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2040		1250	3321		mg/Kg		102	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

GC VOA

Prep Batch: 38105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Total/NA	Solid	5035	
890-3288-2	PH02	Total/NA	Solid	5035	
MB 880-38105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3287-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3287-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 38186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Total/NA	Solid	5035	
890-3288-2	PH02	Total/NA	Solid	5035	
MB 880-38186/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38186/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38186/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20914-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-20914-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Total/NA	Solid	8021B	38186
890-3288-1	PH02	Total/NA	Solid	8021B	38105
890-3288-2	PH02	Total/NA	Solid	8021B	38186
890-3288-2	PH02	Total/NA	Solid	8021B	38105
MB 880-38105/5-A	Method Blank	Total/NA	Solid	8021B	38105
MB 880-38186/5-A	Method Blank	Total/NA	Solid	8021B	38186
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	8021B	38105
LCS 880-38186/1-A	Lab Control Sample	Total/NA	Solid	8021B	38186
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38105
LCSD 880-38186/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38186
880-20914-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	38186
880-20914-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38186
890-3287-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	38105
890-3287-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38105

Analysis Batch: 38352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Total/NA	Solid	Total BTEX	
890-3288-2	PH02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Total/NA	Solid	8015NM Prep	
890-3288-2	PH02	Total/NA	Solid	8015NM Prep	
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

GC Semi VOA

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Total/NA	Solid	8015B NM	38023
890-3288-2	PH02	Total/NA	Solid	8015B NM	38023
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015B NM	38023
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38023
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38023
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38023
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38023

Analysis Batch: 38288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Total/NA	Solid	8015 NM	
890-3288-2	PH02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Soluble	Solid	DI Leach	
890-3288-2	PH02	Soluble	Solid	DI Leach	
MB 880-38010/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38010/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38010/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20768-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-20768-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-20768-A-14-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-20768-A-14-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3288-1	PH02	Soluble	Solid	300.0	38010
890-3288-2	PH02	Soluble	Solid	300.0	38010
MB 880-38010/1-A	Method Blank	Soluble	Solid	300.0	38010
LCS 880-38010/2-A	Lab Control Sample	Soluble	Solid	300.0	38010
LCSD 880-38010/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38010
880-20768-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	38010
880-20768-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38010
880-20768-A-14-B MS	Matrix Spike	Soluble	Solid	300.0	38010
880-20768-A-14-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38010

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Client Sample ID: PH02

Date Collected: 10/24/22 13:00
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3288-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 18:46	MNR	EET MID
Total/NA	Prep	5035			5.02 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 01:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38352	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38288	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 01:33	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38010	10/27/22 11:26	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	38167	10/30/22 15:38	CH	EET MID

Client Sample ID: PH02

Date Collected: 10/24/22 13:10
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3288-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 19:07	MNR	EET MID
Total/NA	Prep	5035			5.03 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 01:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38352	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38288	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 01:54	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38010	10/27/22 11:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38167	10/30/22 15:44	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3288-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3288-1	PH02	Solid	10/24/22 13:00	10/25/22 15:17	1
890-3288-2	PH02	Solid	10/24/22 13:10	10/25/22 15:17	3

Page 56 of 225

11/1/2022

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	
Project Number:	03D2057020	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.4

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2S0_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
PH02	S	10.24.22	1300	1'	G	1		X	X	X
PH02	S	10.24.22 CS	1310	3'	G	1		X	X	X

890-3288 Chain of Custody

Sample Comments

Incident Number
NAPP2221675703

10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.25.22 1547			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Page 20 of 22

Received by OCD: 12/14/2022 7:53:02 PM

Released to Imaging: 1/11/2023 1:59:45 PM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3288-1
SDG Number: 03D2057020

Login Number: 3288
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3288-1
SDG Number: 03D2057020

Login Number: 3288
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3287-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSAU 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
11/1/2022 1:09:45 PM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSAU 2801

Laboratory Job ID: 890-3287-1
SDG: 03D2057020

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Job ID: 890-3287-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3287-1

Receipt
The samples were received on 10/25/2022 3:17 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH03 (890-3287-1) and PH03 (890-3287-2).

GC VOA
Method 8021B: The following sample was diluted due to the nature of the sample matrix: (890-3287-A-1-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Client Sample ID: PH03

Date Collected: 10/24/22 13:30
Date Received: 10/25/22 15:17
Sample Depth: 1

Lab Sample ID: 890-3287-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201		mg/Kg		10/28/22 13:58	11/01/22 00:26	1
Toluene	<0.00201	U F1	0.00201		mg/Kg		10/28/22 13:58	11/01/22 00:26	1
Ethylbenzene	<0.00201	U F1	0.00201		mg/Kg		10/28/22 13:58	11/01/22 00:26	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402		mg/Kg		10/28/22 13:58	11/01/22 00:26	1
o-Xylene	<0.00201	U F1	0.00201		mg/Kg		10/28/22 13:58	11/01/22 00:26	1
Xylenes, Total	<0.00402	U F1	0.00402		mg/Kg		10/28/22 13:58	11/01/22 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*10/28/22 13:58*	*11/01/22 00:26*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*10/28/22 13:58*	*11/01/22 00:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 00:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 00:51	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/27/22 13:56*	*10/30/22 00:51*	*1*
o-Terphenyl	*101*		*70 - 130*	*10/27/22 13:56*	*10/30/22 00:51*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10400**		99.2		mg/Kg			10/30/22 00:08	20

Client Sample ID: PH03

Date Collected: 10/24/22 13:45
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3287-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 00:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 00:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 00:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/28/22 13:58	11/01/22 00:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 00:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/28/22 13:58	11/01/22 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/28/22 13:58*	*11/01/22 00:47*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Client Sample ID: PH03
Date Collected: 10/24/22 13:45
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3287-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/28/22 13:58*	*11/01/22 00:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 01:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 01:12	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 01:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*10/27/22 13:56*	*10/30/22 01:12*	*1*
o-Terphenyl	*103*		*70 - 130*	*10/27/22 13:56*	*10/30/22 01:12*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2350**		24.9		mg/Kg			10/30/22 00:14	5

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)									
		BFB1	DFBZ1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-3287-1	PH03	99	97								
890-3287-1 MS	PH03	89	102								
890-3287-1 MSD	PH03	108	101								
890-3287-2	PH03	96	91								
LCS 880-38105/1-A	Lab Control Sample	94	97								
LCSD 880-38105/2-A	Lab Control Sample Dup	94	97								
MB 880-38105/5-A	Method Blank	114	101								
MB 880-38186/5-A	Method Blank	110	105								

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-3285-A-1-C MS	Matrix Spike	76	81								
890-3285-A-1-D MSD	Matrix Spike Duplicate	88	89								
890-3287-1	PH03	91	101								
890-3287-2	PH03	95	103								
LCS 880-38023/2-A	Lab Control Sample	105	124								
LCSD 880-38023/3-A	Lab Control Sample Dup	103	120								
MB 880-38023/1-A	Method Blank	79	91								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38105/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38105

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*

Lab Sample ID: LCS 880-38105/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1009		mg/Kg		101	70 - 130		
Toluene			0.100	0.1041		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09677		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1987		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.1054		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-38105/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09314		mg/Kg		93	70 - 130	8	35
Toluene			0.100	0.09973		mg/Kg		100	70 - 130	4	35
Ethylbenzene			0.100	0.08607		mg/Kg		86	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.1738		mg/Kg		87	70 - 130	13	35
o-Xylene			0.100	0.09058		mg/Kg		91	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3287-1 MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F1	0.0996	0.09465		mg/Kg		95	70 - 130		
Toluene	<0.00201	U F1	0.0996	0.09684		mg/Kg		97	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

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

Lab Sample ID: 890-3287-1 MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.0996	0.08320		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1658		mg/Kg		83	70 - 130
o-Xylene	<0.00201	U F1	0.0996	0.08570		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-3287-1 MSD
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	<0.00398	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-38186/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38186

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*

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

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/29/22 21:37	1

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

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

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*

Lab Sample ID: LCS 880-38023/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.8		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	748.0		mg/Kg		75	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*124*		*70 - 130*

Lab Sample ID: LCSD 880-38023/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	784.5		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	738.0		mg/Kg		74	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: 890-3285-A-1-C MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	927.7		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)	80.1		998	808.7		mg/Kg		73	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*76*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

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

Lab Sample ID: 890-3285-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38137 — **Prep Batch: 38023**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.7		mg/Kg		80	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	80.1		998	921.4		mg/Kg		84	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38006/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/29/22 20:55	1

Lab Sample ID: LCS 880-38006/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	261.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38006/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3283-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	35.5		253	312.1		mg/Kg		110	90 - 110		

Lab Sample ID: 890-3283-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	35.5		253	311.9		mg/Kg		109	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

GC VOA

Prep Batch: 38105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3287-1	PH03	Total/NA	Solid	5035	
890-3287-2	PH03	Total/NA	Solid	5035	
MB 880-38105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3287-1 MS	PH03	Total/NA	Solid	5035	
890-3287-1 MSD	PH03	Total/NA	Solid	5035	

Prep Batch: 38186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-38186/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 38212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3287-1	PH03	Total/NA	Solid	8021B	38105
890-3287-2	PH03	Total/NA	Solid	8021B	38105
MB 880-38105/5-A	Method Blank	Total/NA	Solid	8021B	38105
MB 880-38186/5-A	Method Blank	Total/NA	Solid	8021B	38186
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	8021B	38105
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38105
890-3287-1 MS	PH03	Total/NA	Solid	8021B	38105
890-3287-1 MSD	PH03	Total/NA	Solid	8021B	38105

Analysis Batch: 38354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3287-1	PH03	Total/NA	Solid	Total BTEX	
890-3287-2	PH03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3287-1	PH03	Total/NA	Solid	8015NM Prep	
890-3287-2	PH03	Total/NA	Solid	8015NM Prep	
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3287-1	PH03	Total/NA	Solid	8015B NM	38023
890-3287-2	PH03	Total/NA	Solid	8015B NM	38023
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015B NM	38023
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38023
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38023
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38023
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38023

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

GC Semi VOA

Analysis Batch: 38287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3287-1	PH03	Total/NA	Solid	8015 NM	
890-3287-2	PH03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3287-1	PH03	Soluble	Solid	DI Leach	
890-3287-2	PH03	Soluble	Solid	DI Leach	
MB 880-38006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3283-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3283-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3287-1	PH03	Soluble	Solid	300.0	38006
890-3287-2	PH03	Soluble	Solid	300.0	38006
MB 880-38006/1-A	Method Blank	Soluble	Solid	300.0	38006
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	300.0	38006
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38006
890-3283-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	38006
890-3283-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38006

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Client Sample ID: PH03
Date Collected: 10/24/22 13:30
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3287-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 00:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38354	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38287	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 00:51	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	38162	10/30/22 00:08	CH	EET MID

Client Sample ID: PH03
Date Collected: 10/24/22 13:45
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3287-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 00:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38354	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38287	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 01:12	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38162	10/30/22 00:14	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3287-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3287-1	PH03	Solid	10/24/22 13:30	10/25/22 15:17	1
890-3287-2	PH03	Solid	10/24/22 13:45	10/25/22 15:17	4

Page 76 of 225

11/1/2022

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057020	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR M007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.4

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
PH03	S	10.24.22	1330	1'	G	1		X	X	X	
PH03	S	10.24.22	1345	4'	G	1		X	X	X	

890-3287 Chain of Custody

Incident Number
NAPP2221675703

10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.25.22 1547			
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Page 18 of 20

Received by OCD: 12/14/2022 7:53:02 PM

Released to Imaging: 1/11/2023 1:59:45 PM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3287-1
SDG Number: 03D2057020

Login Number: 3287
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3287-1
SDG Number: 03D2057020

Login Number: 3287
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3286-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSAU 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
11/1/2022 1:08:30 PM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSAU 2801

Laboratory Job ID: 890-3286-1
SDG: 03D2057020

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Job ID: 890-3286-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3286-1

Receipt
The samples were received on 10/25/2022 3:17 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH04 (890-3286-1), PH04 (890-3286-2) and PH04 (890-3286-3).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3291-A-1-B), (890-3291-A-1-C MS) and (890-3291-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Client Sample ID: PH04

Date Collected: 10/24/22 14:05
Date Received: 10/25/22 15:17
Sample Depth: 1

Lab Sample ID: 890-3286-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/30/22 16:11	10/31/22 17:45	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/30/22 16:11	10/31/22 17:45	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/30/22 16:11	10/31/22 17:45	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/30/22 16:11	10/31/22 17:45	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/30/22 16:11	10/31/22 17:45	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/30/22 16:11	10/31/22 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*10/30/22 16:11*	*10/31/22 17:45*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*10/30/22 16:11*	*10/31/22 17:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**999**		49.8		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/27/22 13:56	10/30/22 00:08	1
Diesel Range Organics (Over C10-C28)	**861**		49.8		mg/Kg		10/27/22 13:56	10/30/22 00:08	1
Oil Range Organics (Over C28-C36)	**138**		49.8		mg/Kg		10/27/22 13:56	10/30/22 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/27/22 13:56*	*10/30/22 00:08*	*1*
o-Terphenyl	*100*		*70 - 130*	*10/27/22 13:56*	*10/30/22 00:08*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10600**		101		mg/Kg			10/30/22 08:20	20

Client Sample ID: PH04

Date Collected: 10/24/22 14:20
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3286-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 18:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 18:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 18:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/30/22 16:11	10/31/22 18:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 18:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/30/22 16:11	10/31/22 18:05	1

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Client Sample ID: PH04

Date Collected: 10/24/22 14:20
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3286-2

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*10/30/22 16:11*	*10/31/22 18:05*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*10/30/22 16:11*	*10/31/22 18:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 00:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 00:29	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*10/27/22 13:56*	*10/30/22 00:29*	*1*
o-Terphenyl	*112*		*70 - 130*	*10/27/22 13:56*	*10/30/22 00:29*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2480**		25.0	mg/Kg			10/30/22 08:40	5

Client Sample ID: PH04

Date Collected: 10/25/22 09:30
Date Received: 10/25/22 15:17
Sample Depth: 8

Lab Sample ID: 890-3286-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/30/22 16:11	10/31/22 18:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/30/22 16:11	10/31/22 18:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/30/22 16:11	10/31/22 18:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/30/22 16:11	10/31/22 18:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/30/22 16:11	10/31/22 18:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/30/22 16:11	10/31/22 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*10/30/22 16:11*	*10/31/22 18:26*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/30/22 16:11*	*10/31/22 18:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 13:27	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Client Sample ID: PH04

Date Collected: 10/25/22 09:30
Date Received: 10/25/22 15:17
Sample Depth: 8

Lab Sample ID: 890-3286-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 15:04	10/30/22 00:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/27/22 15:04	10/30/22 00:51	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 15:04	10/30/22 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*10/27/22 15:04*	*10/30/22 00:51*	*1*
o-Terphenyl	*94*		*70 - 130*	*10/27/22 15:04*	*10/30/22 00:51*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.3**		4.99		mg/Kg			10/30/22 08:47	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20914-A-2-C MS	Matrix Spike	84	100
880-20914-A-2-D MSD	Matrix Spike Duplicate	85	99
890-3286-1	PH04	108	97
890-3286-2	PH04	90	98
890-3286-3	PH04	99	100
LCS 880-38186/1-A	Lab Control Sample	79	92
LCSD 880-38186/2-A	Lab Control Sample Dup	78	91
MB 880-38186/5-A	Method Blank	110	105

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3285-A-1-C MS	Matrix Spike	76	81
890-3285-A-1-D MSD	Matrix Spike Duplicate	88	89
890-3286-1	PH04	91	100
890-3286-2	PH04	101	112
890-3286-3	PH04	93	94
890-3291-A-1-C MS	Matrix Spike	105	175 S1+
890-3291-A-1-D MSD	Matrix Spike Duplicate	101	169 S1+
LCS 880-38023/2-A	Lab Control Sample	105	124
LCS 880-38030/2-A	Lab Control Sample	110	113
LCSD 880-38023/3-A	Lab Control Sample Dup	103	120
LCSD 880-38030/3-A	Lab Control Sample Dup	104	103
MB 880-38023/1-A	Method Blank	79	91
MB 880-38030/1-A	Method Blank	83	86

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38186/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38186

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/30/22 16:11	10/31/22 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*

Lab Sample ID: LCS 880-38186/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38186

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09449		mg/Kg		94	70 - 130		
Toluene			0.100	0.1036		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09290		mg/Kg		93	70 - 130		
m-Xylene & p-Xylene			0.200	0.1873		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.09541		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-38186/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38186

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08977		mg/Kg		90	70 - 130	5	35
Toluene			0.100	0.09741		mg/Kg		97	70 - 130	6	35
Ethylbenzene			0.100	0.08724		mg/Kg		87	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1757		mg/Kg		88	70 - 130	6	35
o-Xylene			0.100	0.09083		mg/Kg		91	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 880-20914-A-2-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.09329		mg/Kg		93	70 - 130		
Toluene	<0.00199	U	0.101	0.09323		mg/Kg		92	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

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

Lab Sample ID: 880-20914-A-2-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.101	0.08300		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1664		mg/Kg		82	70 - 130
o-Xylene	<0.00199	U	0.101	0.08979		mg/Kg		89	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-20914-A-2-D MSD
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.08222		mg/Kg		83	70 - 130	13	35
Toluene	<0.00199	U	0.0994	0.08174		mg/Kg		82	70 - 130	13	35
Ethylbenzene	<0.00199	U	0.0994	0.07245		mg/Kg		73	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1450		mg/Kg		72	70 - 130	14	35
o-Xylene	<0.00199	U	0.0994	0.07980		mg/Kg		80	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*

Lab Sample ID: LCS 880-38023/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	847.8		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)			1000	748.0		mg/Kg		75	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

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

Lab Sample ID: LCS 880-38023/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38023

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: LCSD 880-38023/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	784.5		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	738.0		mg/Kg		74	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	120		70 - 130

Lab Sample ID: 890-3285-A-1-C MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	927.7		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	80.1		998	808.7		mg/Kg		73	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 890-3285-A-1-D MSD
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.7		mg/Kg		80	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	80.1		998	921.4		mg/Kg		84	70 - 130	13	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	89		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

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

Lab Sample ID: MB 880-38030/1-A
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38030

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 15:04	10/29/22 21:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 15:04	10/29/22 21:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 15:04	10/29/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*10/27/22 15:04*	*10/29/22 21:37*	*1*
o-Terphenyl	*86*		*70 - 130*	*10/27/22 15:04*	*10/29/22 21:37*	*1*

Lab Sample ID: LCS 880-38030/2-A
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38030

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	820.2		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1025		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: LCSD 880-38030/3-A
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38030

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	811.4		mg/Kg		81	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	945.5		mg/Kg		95	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Lab Sample ID: 890-3291-A-1-C MS
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	321		998	1085		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)	5750		998	6103	4	mg/Kg		35	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

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

Lab Sample ID: 890-3291-A-1-C MS
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38030

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	175	S1+	70 - 130

Lab Sample ID: 890-3291-A-1-D MSD
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	321		998	1054		mg/Kg		74	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	5750		998	5872	4	mg/Kg		12	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	169	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38007/1-A
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/30/22 08:00	1

Lab Sample ID: LCS 880-38007/2-A
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-38007/3-A
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	264.0		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-3286-1 MS
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: PH04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	10600		5030	15700		mg/Kg		101	90 - 110		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3286-1 MSD
Matrix: Solid
Analysis Batch: 38166

Client Sample ID: PH04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10600		5030	15700		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

GC VOA

Prep Batch: 38186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-1	PH04	Total/NA	Solid	5035	
890-3286-2	PH04	Total/NA	Solid	5035	
890-3286-3	PH04	Total/NA	Solid	5035	
MB 880-38186/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38186/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38186/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20914-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-20914-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-1	PH04	Total/NA	Solid	8021B	38186
890-3286-2	PH04	Total/NA	Solid	8021B	38186
890-3286-3	PH04	Total/NA	Solid	8021B	38186
MB 880-38186/5-A	Method Blank	Total/NA	Solid	8021B	38186
LCS 880-38186/1-A	Lab Control Sample	Total/NA	Solid	8021B	38186
LCSD 880-38186/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38186
880-20914-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	38186
880-20914-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38186

Analysis Batch: 38351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-1	PH04	Total/NA	Solid	Total BTEX	
890-3286-2	PH04	Total/NA	Solid	Total BTEX	
890-3286-3	PH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-1	PH04	Total/NA	Solid	8015NM Prep	
890-3286-2	PH04	Total/NA	Solid	8015NM Prep	
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 38030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-3	PH04	Total/NA	Solid	8015NM Prep	
MB 880-38030/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38030/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38030/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3291-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3291-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-3	PH04	Total/NA	Solid	8015B NM	38030
MB 880-38030/1-A	Method Blank	Total/NA	Solid	8015B NM	38030

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

GC Semi VOA (Continued)

Analysis Batch: 38135 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-38030/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38030
LCSD 880-38030/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38030
890-3291-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38030
890-3291-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38030

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-1	PH04	Total/NA	Solid	8015B NM	38023
890-3286-2	PH04	Total/NA	Solid	8015B NM	38023
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015B NM	38023
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38023
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38023
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38023
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38023

Analysis Batch: 38279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-1	PH04	Total/NA	Solid	8015 NM	
890-3286-2	PH04	Total/NA	Solid	8015 NM	
890-3286-3	PH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-1	PH04	Soluble	Solid	DI Leach	
890-3286-2	PH04	Soluble	Solid	DI Leach	
890-3286-3	PH04	Soluble	Solid	DI Leach	
MB 880-38007/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38007/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38007/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3286-1 MS	PH04	Soluble	Solid	DI Leach	
890-3286-1 MSD	PH04	Soluble	Solid	DI Leach	

Analysis Batch: 38166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3286-1	PH04	Soluble	Solid	300.0	38007
890-3286-2	PH04	Soluble	Solid	300.0	38007
890-3286-3	PH04	Soluble	Solid	300.0	38007
MB 880-38007/1-A	Method Blank	Soluble	Solid	300.0	38007
LCS 880-38007/2-A	Lab Control Sample	Soluble	Solid	300.0	38007
LCSD 880-38007/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38007
890-3286-1 MS	PH04	Soluble	Solid	300.0	38007
890-3286-1 MSD	PH04	Soluble	Solid	300.0	38007

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Client Sample ID: PH04
Date Collected: 10/24/22 14:05
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3286-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 17:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38351	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38279	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 00:08	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	38007	10/27/22 11:23	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	38166	10/30/22 08:20	CH	EET MID

Client Sample ID: PH04
Date Collected: 10/24/22 14:20
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3286-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 18:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38351	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38279	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 00:29	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38007	10/27/22 11:23	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38166	10/30/22 08:40	CH	EET MID

Client Sample ID: PH04
Date Collected: 10/25/22 09:30
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3286-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 18:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38351	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38279	10/31/22 13:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38030	10/27/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38135	10/30/22 00:51	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38007	10/27/22 11:23	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38166	10/30/22 08:47	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3286-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3286-1	PH04	Solid	10/24/22 14:05	10/25/22 15:17	1
890-3286-2	PH04	Solid	10/24/22 14:20	10/25/22 15:17	4
890-3286-3	PH04	Solid	10/25/22 09:30	10/25/22 15:17	8

Page 99 of 225

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057020	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	WM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.4

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
PH04	S	10.24.22	1405	1'	G	1		X	X	X	
PH04	S	10.24.22	1420	4'	G	1		X	X	X	
PH04	S	10.25.22	930	8'	G	1		X	X	X	

Incident Number
NAPP2221675703

890-3286 Chain of Custody

10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.25.22 1517	2		
3			4		
5			6		

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

Page 21 of 23
11/1/2022
Received by OCD: 12/14/2022 7:53:02 PM
Released to Imaging: 1/11/2023 1:59:45 PM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3286-1
SDG Number: 03D2057020

Login Number: 3286
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3286-1
SDG Number: 03D2057020

Login Number: 3286
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3285-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSUA 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
11/1/2022 2:18:16 PM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSUA 2801

Laboratory Job ID: 890-3285-1
SDG: 03D2057020

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Job ID: 890-3285-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3285-1

Receipt
The samples were received on 10/25/2022 3:17 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH05 (890-3285-1) and PH05 (890-3285-2).

GC VOA
Method 8021B: The following sample was diluted due to the nature of the sample matrix: (890-3287-A-1-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Client Sample ID: PH05

Date Collected: 10/24/22 15:15
Date Received: 10/25/22 15:17
Sample Depth: 1

Lab Sample ID: 890-3285-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/28/22 13:58	11/01/22 07:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/28/22 13:58	11/01/22 07:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/28/22 13:58	11/01/22 07:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/28/22 13:58	11/01/22 07:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/22 13:58	11/01/22 07:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/28/22 13:58	11/01/22 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*10/28/22 13:58*	*11/01/22 07:02*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*10/28/22 13:58*	*11/01/22 07:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**80.1**		49.8		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/27/22 13:56	10/29/22 22:42	1
Diesel Range Organics (Over C10-C28)	**80.1**		49.8		mg/Kg		10/27/22 13:56	10/29/22 22:42	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/27/22 13:56	10/29/22 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*10/27/22 13:56*	*10/29/22 22:42*	*1*
o-Terphenyl	*89*		*70 - 130*	*10/27/22 13:56*	*10/29/22 22:42*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2820**		25.1		mg/Kg			10/29/22 23:54	5

Client Sample ID: PH05

Date Collected: 10/24/22 15:30
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3285-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/28/22 13:58	11/01/22 08:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/28/22 13:58	11/01/22 08:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/28/22 13:58	11/01/22 08:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/28/22 13:58	11/01/22 08:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/28/22 13:58	11/01/22 08:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/28/22 13:58	11/01/22 08:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*10/28/22 13:58*	*11/01/22 08:54*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Client Sample ID: PH05
Date Collected: 10/24/22 15:30
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3285-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*10/28/22 13:58*	*11/01/22 08:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/01/22 15:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/29/22 23:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/29/22 23:47	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/29/22 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*10/27/22 13:56*	*10/29/22 23:47*	*1*
o-Terphenyl	*118*		*70 - 130*	*10/27/22 13:56*	*10/29/22 23:47*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55.6**		5.00		mg/Kg			10/30/22 00:01	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3285-1	PH05	89	102
890-3285-2	PH05	95	98
890-3287-A-1-C MS	Matrix Spike	89	102
890-3287-A-1-D MSD	Matrix Spike Duplicate	108	101
LCS 880-38105/1-A	Lab Control Sample	94	97
LCSD 880-38105/2-A	Lab Control Sample Dup	94	97
MB 880-38105/5-A	Method Blank	114	101
MB 880-38186/5-A	Method Blank	110	105

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3285-1	PH05	77	89
890-3285-1 MS	PH05	76	81
890-3285-1 MSD	PH05	88	89
890-3285-2	PH05	105	118
LCS 880-38023/2-A	Lab Control Sample	105	124
LCSD 880-38023/3-A	Lab Control Sample Dup	103	120
MB 880-38023/1-A	Method Blank	79	91

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38105/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38105

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*

Lab Sample ID: LCS 880-38105/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1009		mg/Kg		101	70 - 130		
Toluene			0.100	0.1041		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09677		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1987		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.1054		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-38105/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09314		mg/Kg		93	70 - 130	8	35
Toluene			0.100	0.09973		mg/Kg		100	70 - 130	4	35
Ethylbenzene			0.100	0.08607		mg/Kg		86	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.1738		mg/Kg		87	70 - 130	13	35
o-Xylene			0.100	0.09058		mg/Kg		91	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3287-A-1-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F1	0.0996	0.09465		mg/Kg		95	70 - 130		
Toluene	<0.00201	U F1	0.0996	0.09684		mg/Kg		97	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

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

Lab Sample ID: 890-3287-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38212 — **Prep Batch: 38105**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.0996	0.08320		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1658		mg/Kg		83	70 - 130
o-Xylene	<0.00201	U F1	0.0996	0.08570		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-3287-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38212 — **Prep Batch: 38105**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	<0.00398	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-38186/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38212 — **Prep Batch: 38186**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*

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

Lab Sample ID: MB 880-38023/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38137 — **Prep Batch: 38023**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/29/22 21:37	1

QC Sample Results

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

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

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*

Lab Sample ID: LCS 880-38023/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.8		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	748.0		mg/Kg		75	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*124*		*70 - 130*

Lab Sample ID: LCSD 880-38023/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	784.5		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	738.0		mg/Kg		74	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: 890-3285-1 MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: PH05
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	927.7		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)	80.1		998	808.7		mg/Kg		73	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*76*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

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

Lab Sample ID: 890-3285-1 MSD
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: PH05
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.7		mg/Kg		80	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	80.1		998	921.4		mg/Kg		84	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38006/1-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/29/22 20:55	1

Lab Sample ID: LCS 880-38006/2-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	261.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38006/3-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3283-A-1-B MS
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	35.5		253	312.1		mg/Kg		110	90 - 110		

Lab Sample ID: 890-3283-A-1-C MSD
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	35.5		253	311.9		mg/Kg		109	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

GC VOA

Prep Batch: 38105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3285-1	PH05	Total/NA	Solid	5035	
890-3285-2	PH05	Total/NA	Solid	5035	
MB 880-38105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3287-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3287-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 38186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-38186/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 38212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3285-1	PH05	Total/NA	Solid	8021B	38105
890-3285-2	PH05	Total/NA	Solid	8021B	38105
MB 880-38105/5-A	Method Blank	Total/NA	Solid	8021B	38105
MB 880-38186/5-A	Method Blank	Total/NA	Solid	8021B	38186
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	8021B	38105
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38105
890-3287-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	38105
890-3287-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38105

Analysis Batch: 38358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3285-1	PH05	Total/NA	Solid	Total BTEX	
890-3285-2	PH05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3285-1	PH05	Total/NA	Solid	8015NM Prep	
890-3285-2	PH05	Total/NA	Solid	8015NM Prep	
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3285-1 MS	PH05	Total/NA	Solid	8015NM Prep	
890-3285-1 MSD	PH05	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3285-1	PH05	Total/NA	Solid	8015B NM	38023
890-3285-2	PH05	Total/NA	Solid	8015B NM	38023
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015B NM	38023
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38023
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38023
890-3285-1 MS	PH05	Total/NA	Solid	8015B NM	38023
890-3285-1 MSD	PH05	Total/NA	Solid	8015B NM	38023

QC Association Summary

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

GC Semi VOA

Analysis Batch: 38286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3285-1	PH05	Total/NA	Solid	8015 NM	
890-3285-2	PH05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3285-1	PH05	Soluble	Solid	DI Leach	
890-3285-2	PH05	Soluble	Solid	DI Leach	
MB 880-38006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3283-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3283-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3285-1	PH05	Soluble	Solid	300.0	38006
890-3285-2	PH05	Soluble	Solid	300.0	38006
MB 880-38006/1-A	Method Blank	Soluble	Solid	300.0	38006
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	300.0	38006
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38006
890-3283-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	38006
890-3283-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38006

Lab Chronicle

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Client Sample ID: PH05

Date Collected: 10/24/22 15:15
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3285-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 07:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38358	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38286	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/29/22 22:42	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	38162	10/29/22 23:54	CH	EET MID

Client Sample ID: PH05

Date Collected: 10/24/22 15:30
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3285-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 08:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38358	11/01/22 15:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38286	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/29/22 23:47	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/30/22 00:01	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSUA 2801

Job ID: 890-3285-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3285-1	PH05	Solid	10/24/22 15:15	10/25/22 15:17	1
890-3285-2	PH05	Solid	10/24/22 15:30	10/25/22 15:17	4

Page 119 of 225

11/1/2022

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	
Project Number:	03D2057020	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	IR#007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.9	
Total Containers:		Corrected Temperature:	1.7	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
PH05	S	10.24.22	1515	1'	G	1		X	X	X
PH05	S	10.24.22 CS	1530	4'	G	1		X	X	X

Parameters

890-3285 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident Number
NAPP2221675703

10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.25.22 1517	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 12/14/2022 7:53:02 PM

Released to Imaging: 1/11/2023 1:59:45 PM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3285-1
SDG Number: 03D2057020

Login Number: 3285
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3285-1
SDG Number: 03D2057020

Login Number: 3285
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3282-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSAU 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
10/31/2022 1:18:11 PM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSAU 2801

Laboratory Job ID: 890-3282-1
SDG: 03D2057020

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Job ID: 890-3282-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3282-1

Receipt
The samples were received on 10/25/2022 3:17 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH06 (890-3282-1), PH06 (890-3282-2) and PH06 (890-3282-3).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-38024/2-A) and (LCSD 880-38024/3-A). Evidence of matrix interferences is not obvious.

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

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

Released to Imaging: 1/11/2023 1:59:45 PM

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Client Sample ID: PH06

Date Collected: 10/25/22 11:00
Date Received: 10/25/22 15:17
Sample Depth: 1

Lab Sample ID: 890-3282-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/28/22 14:11	10/31/22 00:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/28/22 14:11	10/31/22 00:47	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/28/22 14:11	10/31/22 00:47	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/28/22 14:11	10/31/22 00:47	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/28/22 14:11	10/31/22 00:47	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/28/22 14:11	10/31/22 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*10/28/22 14:11*	*10/31/22 00:47*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/28/22 14:11*	*10/31/22 00:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/27/22 13:59	10/29/22 13:04	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/27/22 13:59	10/29/22 13:04	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/27/22 13:59	10/29/22 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*10/27/22 13:59*	*10/29/22 13:04*	*1*
o-Terphenyl	*92*		*70 - 130*	*10/27/22 13:59*	*10/29/22 13:04*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.0**		4.99		mg/Kg			10/29/22 22:28	1

Client Sample ID: PH06

Date Collected: 10/25/22 11:50
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3282-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/28/22 14:11	10/31/22 01:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/28/22 14:11	10/31/22 01:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/28/22 14:11	10/31/22 01:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/28/22 14:11	10/31/22 01:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/28/22 14:11	10/31/22 01:07	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/28/22 14:11	10/31/22 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*10/28/22 14:11*	*10/31/22 01:07*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Client Sample ID: PH06

Date Collected: 10/25/22 11:50
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3282-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*10/28/22 14:11*	*10/31/22 01:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/22 13:59	10/29/22 14:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/22 13:59	10/29/22 14:08	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/22 13:59	10/29/22 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*10/27/22 13:59*	*10/29/22 14:08*	*1*
o-Terphenyl	*84*		*70 - 130*	*10/27/22 13:59*	*10/29/22 14:08*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23.8**		4.97	mg/Kg			10/29/22 22:34	1

Client Sample ID: PH06

Date Collected: 10/25/22 12:00
Date Received: 10/25/22 15:17
Sample Depth: 8

Lab Sample ID: 890-3282-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/28/22 14:11	10/31/22 01:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/28/22 14:11	10/31/22 01:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/28/22 14:11	10/31/22 01:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/28/22 14:11	10/31/22 01:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/28/22 14:11	10/31/22 01:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/28/22 14:11	10/31/22 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*10/28/22 14:11*	*10/31/22 01:28*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*10/28/22 14:11*	*10/31/22 01:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/31/22 13:36	1

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Client Sample ID: PH06

Date Collected: 10/25/22 12:00
Date Received: 10/25/22 15:17
Sample Depth: 8

Lab Sample ID: 890-3282-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/27/22 13:59	10/29/22 14:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/27/22 13:59	10/29/22 14:30	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/27/22 13:59	10/29/22 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*10/27/22 13:59*	*10/29/22 14:30*	*1*
o-Terphenyl	*97*		*70 - 130*	*10/27/22 13:59*	*10/29/22 14:30*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18.0**		5.02		mg/Kg			10/29/22 22:41	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3280-A-1-E MS	Matrix Spike	86	100
890-3280-A-1-F MSD	Matrix Spike Duplicate	87	106
890-3282-1	PH06	121	100
890-3282-2	PH06	136 S1+	102
890-3282-3	PH06	131 S1+	102
LCS 880-38106/1-A	Lab Control Sample	91	101
LCSD 880-38106/2-A	Lab Control Sample Dup	93	100
MB 880-37947/5-A	Method Blank	96	91
MB 880-38106/5-A	Method Blank	105	94

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3282-1	PH06	79	92
890-3282-1 MS	PH06	82	85
890-3282-1 MSD	PH06	99	102
890-3282-2	PH06	74	84
890-3282-3	PH06	88	97
LCS 880-38024/2-A	Lab Control Sample	121	141 S1+
LCSD 880-38024/3-A	Lab Control Sample Dup	127	145 S1+
MB 880-38024/1-A	Method Blank	92	103

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37947/5-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37947

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/26/22 16:25	10/30/22 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/26/22 16:25*	*10/30/22 12:16*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/26/22 16:25*	*10/30/22 12:16*	*1*

Lab Sample ID: MB 880-38106/5-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38106

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/28/22 14:11	10/30/22 23:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:02*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:02*	*1*

Lab Sample ID: LCS 880-38106/1-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38106

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08696		mg/Kg		87	70 - 130		
Toluene			0.100	0.08889		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.08632		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene			0.200	0.1636		mg/Kg		82	70 - 130		
o-Xylene			0.100	0.09346		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-38106/2-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38106

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09188		mg/Kg		92	70 - 130	6	35

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

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

Lab Sample ID: LCSD 880-38106/2-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38106

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09274		mg/Kg		93	70 - 130	4	35
Ethylbenzene			0.100	0.09100		mg/Kg		91	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1709		mg/Kg		85	70 - 130	4	35
o-Xylene			0.100	0.09803		mg/Kg		98	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-3280-A-1-E MS
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.08943		mg/Kg		89	70 - 130
Toluene	<0.00200	U	0.0998	0.09103		mg/Kg		91	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.08402		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1535		mg/Kg		77	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08661		mg/Kg		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-3280-A-1-F MSD
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38106

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08552		mg/Kg		85	70 - 130	4	35
Toluene	<0.00200	U	0.0990	0.08543		mg/Kg		86	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.0990	0.08179		mg/Kg		83	70 - 130	3	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1488		mg/Kg		75	70 - 130	3	35
o-Xylene	<0.00200	U	0.0990	0.08418		mg/Kg		85	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MB 880-38024/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38024

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:59	10/29/22 10:00	1

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

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

Lab Sample ID: MB 880-38024/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38024

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:59	10/29/22 10:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:59	10/29/22 10:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/27/22 13:59*	*10/29/22 10:00*	*1*
o-Terphenyl	*103*		*70 - 130*	*10/27/22 13:59*	*10/29/22 10:00*	*1*

Lab Sample ID: LCS 880-38024/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38024

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1170		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	855.4		mg/Kg		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*141*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-38024/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38024

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1233		mg/Kg		123	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	912.3		mg/Kg		91	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*127*		*70 - 130*
o-Terphenyl	*145*	*S1+*	*70 - 130*

Lab Sample ID: 890-3282-1 MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: PH06
Prep Type: Total/NA
Prep Batch: 38024

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	994.7		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	895.0		mg/Kg		88	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*82*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

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

Lab Sample ID: 890-3282-1 MSD
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: PH06
Prep Type: Total/NA
Prep Batch: 38024

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	914.9		mg/Kg		90	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1085		mg/Kg		107	70 - 130	19	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38006/1-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/29/22 20:55	1

Lab Sample ID: LCS 880-38006/2-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	261.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38006/3-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3280-A-1-B MS
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	34.7		250	285.4		mg/Kg		100	90 - 110		

Lab Sample ID: 890-3280-A-1-C MSD
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	34.7		250	286.4		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

GC VOA

Prep Batch: 37947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-37947/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 38106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3282-1	PH06	Total/NA	Solid	5035	
890-3282-2	PH06	Total/NA	Solid	5035	
890-3282-3	PH06	Total/NA	Solid	5035	
MB 880-38106/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38106/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38106/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3280-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3280-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3282-1	PH06	Total/NA	Solid	8021B	38106
890-3282-2	PH06	Total/NA	Solid	8021B	38106
890-3282-3	PH06	Total/NA	Solid	8021B	38106
MB 880-37947/5-A	Method Blank	Total/NA	Solid	8021B	37947
MB 880-38106/5-A	Method Blank	Total/NA	Solid	8021B	38106
LCS 880-38106/1-A	Lab Control Sample	Total/NA	Solid	8021B	38106
LCSD 880-38106/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38106
890-3280-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	38106
890-3280-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38106

Analysis Batch: 38258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3282-1	PH06	Total/NA	Solid	Total BTEX	
890-3282-2	PH06	Total/NA	Solid	Total BTEX	
890-3282-3	PH06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3282-1	PH06	Total/NA	Solid	8015NM Prep	
890-3282-2	PH06	Total/NA	Solid	8015NM Prep	
890-3282-3	PH06	Total/NA	Solid	8015NM Prep	
MB 880-38024/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38024/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38024/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3282-1 MS	PH06	Total/NA	Solid	8015NM Prep	
890-3282-1 MSD	PH06	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3282-1	PH06	Total/NA	Solid	8015B NM	38024
890-3282-2	PH06	Total/NA	Solid	8015B NM	38024
890-3282-3	PH06	Total/NA	Solid	8015B NM	38024
MB 880-38024/1-A	Method Blank	Total/NA	Solid	8015B NM	38024
LCS 880-38024/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38024

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

GC Semi VOA (Continued)

Analysis Batch: 38137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-38024/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38024
890-3282-1 MS	PH06	Total/NA	Solid	8015B NM	38024
890-3282-1 MSD	PH06	Total/NA	Solid	8015B NM	38024

Analysis Batch: 38283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3282-1	PH06	Total/NA	Solid	8015 NM	
890-3282-2	PH06	Total/NA	Solid	8015 NM	
890-3282-3	PH06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3282-1	PH06	Soluble	Solid	DI Leach	
890-3282-2	PH06	Soluble	Solid	DI Leach	
890-3282-3	PH06	Soluble	Solid	DI Leach	
MB 880-38006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3280-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3280-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3282-1	PH06	Soluble	Solid	300.0	38006
890-3282-2	PH06	Soluble	Solid	300.0	38006
890-3282-3	PH06	Soluble	Solid	300.0	38006
MB 880-38006/1-A	Method Blank	Soluble	Solid	300.0	38006
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	300.0	38006
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38006
890-3280-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	38006
890-3280-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38006

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Client Sample ID: PH06
Date Collected: 10/25/22 11:00
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3282-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/31/22 00:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38258	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38283	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38024	10/27/22 13:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/29/22 13:04	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 22:28	CH	EET MID

Client Sample ID: PH06
Date Collected: 10/25/22 11:50
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3282-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/31/22 01:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38258	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38283	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38024	10/27/22 13:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/29/22 14:08	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 22:34	CH	EET MID

Client Sample ID: PH06
Date Collected: 10/25/22 12:00
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3282-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/31/22 01:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38258	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38283	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38024	10/27/22 13:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/29/22 14:30	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 22:41	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3282-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3282-1	PH06	Solid	10/25/22 11:00	10/25/22 15:17	1
890-3282-2	PH06	Solid	10/25/22 11:50	10/25/22 15:17	4
890-3282-3	PH06	Solid	10/25/22 12:00	10/25/22 15:17	8

Page 140 of 225

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057020	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TAM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.4

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
PH06	S	10.25.22	1100	1'	G	1		X	X	X
PH06	S	10.25.22	1150	4'	G	1		X	X	X
PH06	S	10.25.22	1200	8'	G	1		X	X	X

ANALYSIS REQUEST / Parameters

890-3282 Chain of Custody

Sample Comments

Incident Number
NAPP2221675703

Sa 10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Amanda Sutton	10/25/22 1518	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 12/14/2022 7:53:02 PM

Released to Imaging: 1/11/2023 1:59:45 PM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3282-1
SDG Number: 03D2057020

Login Number: 3282
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3282-1
SDG Number: 03D2057020

Login Number: 3282
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3281-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSAU 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
11/1/2022 1:13:57 PM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSAU 2801

Laboratory Job ID: 890-3281-1
SDG: 03D2057020

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Job ID: 890-3281-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3281-1

Receipt
The samples were received on 10/25/2022 3:17 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH07 (890-3281-1), PH07 (890-3281-2) and PH07 (890-3281-3).

GC VOA
Method 8021B: The following sample was diluted due to the nature of the sample matrix: (890-3287-A-1-D MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Client Sample ID: PH07

Date Collected: 10/25/22 09:45
Date Received: 10/25/22 15:17
Sample Depth: 1

Lab Sample ID: 890-3281-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 06:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 06:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 06:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/28/22 13:58	11/01/22 06:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 06:00	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/28/22 13:58	11/01/22 06:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*10/28/22 13:58*	*11/01/22 06:00*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/28/22 13:58*	*11/01/22 06:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 03:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 03:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*10/27/22 13:56*	*10/30/22 03:19*	*1*
o-Terphenyl	*89*		*70 - 130*	*10/27/22 13:56*	*10/30/22 03:19*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.4**		5.00		mg/Kg			10/29/22 21:54	1

Client Sample ID: PH07

Date Collected: 10/25/22 09:50
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3281-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 06:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 06:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 06:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/28/22 13:58	11/01/22 06:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	11/01/22 06:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/28/22 13:58	11/01/22 06:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*10/28/22 13:58*	*11/01/22 06:21*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Client Sample ID: PH07

Date Collected: 10/25/22 09:50
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3281-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/28/22 13:58*	*11/01/22 06:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 03:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 03:41	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 03:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*10/27/22 13:56*	*10/30/22 03:41*	*1*
o-Terphenyl	*107*		*70 - 130*	*10/27/22 13:56*	*10/30/22 03:41*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.3**		4.98	mg/Kg			10/29/22 22:14	1

Client Sample ID: PH07

Date Collected: 10/25/22 10:00
Date Received: 10/25/22 15:17
Sample Depth: 8

Lab Sample ID: 890-3281-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/28/22 13:58	11/01/22 06:41	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/28/22 13:58	11/01/22 06:41	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/28/22 13:58	11/01/22 06:41	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/28/22 13:58	11/01/22 06:41	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/28/22 13:58	11/01/22 06:41	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/28/22 13:58	11/01/22 06:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*10/28/22 13:58*	*11/01/22 06:41*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*10/28/22 13:58*	*11/01/22 06:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/01/22 09:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/31/22 13:36	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Client Sample ID: PH07

Date Collected: 10/25/22 10:00
Date Received: 10/25/22 15:17
Sample Depth: 8

Lab Sample ID: 890-3281-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 04:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 04:02	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 04:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*10/27/22 13:56*	*10/30/22 04:02*	*1*
o-Terphenyl	*95*		*70 - 130*	*10/27/22 13:56*	*10/30/22 04:02*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.7**		5.00		mg/Kg			10/29/22 22:21	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-3281-1	PH07	93	94										
890-3281-2	PH07	94	100										
890-3281-3	PH07	91	98										
890-3287-A-1-C MS	Matrix Spike	89	102										
890-3287-A-1-D MSD	Matrix Spike Duplicate	108	101										
LCS 880-38105/1-A	Lab Control Sample	94	97										
LCSD 880-38105/2-A	Lab Control Sample Dup	94	97										
MB 880-38105/5-A	Method Blank	114	101										
MB 880-38186/5-A	Method Blank	110	105										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-3281-1	PH07	78	89										
890-3281-2	PH07	99	107										
890-3281-3	PH07	85	95										
890-3285-A-1-C MS	Matrix Spike	76	81										
890-3285-A-1-D MSD	Matrix Spike Duplicate	88	89										
LCS 880-38023/2-A	Lab Control Sample	105	124										
LCSD 880-38023/3-A	Lab Control Sample Dup	103	120										
MB 880-38023/1-A	Method Blank	79	91										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38105/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38105

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 13:58	10/31/22 23:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/28/22 13:58	10/31/22 23:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*10/28/22 13:58*	*10/31/22 23:57*	*1*

Lab Sample ID: LCS 880-38105/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1009		mg/Kg		101	70 - 130		
Toluene			0.100	0.1041		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09677		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1987		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.1054		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-38105/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09314		mg/Kg		93	70 - 130	8	35
Toluene			0.100	0.09973		mg/Kg		100	70 - 130	4	35
Ethylbenzene			0.100	0.08607		mg/Kg		86	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.1738		mg/Kg		87	70 - 130	13	35
o-Xylene			0.100	0.09058		mg/Kg		91	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3287-A-1-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F1	0.0996	0.09465		mg/Kg		95	70 - 130		
Toluene	<0.00201	U F1	0.0996	0.09684		mg/Kg		97	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

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

Lab Sample ID: 890-3287-A-1-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.0996	0.08320		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1658		mg/Kg		83	70 - 130
o-Xylene	<0.00201	U F1	0.0996	0.08570		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-3287-A-1-D MSD
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	<0.00398	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00201	U F1	0.0994	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-38186/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38186

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*

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

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/27/22 13:56	10/29/22 21:37	1

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

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

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*

Lab Sample ID: LCS 880-38023/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.8		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	748.0		mg/Kg		75	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*124*		*70 - 130*

Lab Sample ID: LCSD 880-38023/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	784.5		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	738.0		mg/Kg		74	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: 890-3285-A-1-C MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	927.7		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)	80.1		998	808.7		mg/Kg		73	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*76*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

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

Lab Sample ID: 890-3285-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38137 — **Prep Batch: 38023**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.7		mg/Kg		80	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	80.1		998	921.4		mg/Kg		84	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38006/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/29/22 20:55	1

Lab Sample ID: LCS 880-38006/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	261.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38006/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3280-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	34.7		250	285.4		mg/Kg		100	90 - 110		

Lab Sample ID: 890-3280-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	34.7		250	286.4		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

GC VOA

Prep Batch: 38105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3281-1	PH07	Total/NA	Solid	5035	
890-3281-2	PH07	Total/NA	Solid	5035	
890-3281-3	PH07	Total/NA	Solid	5035	
MB 880-38105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3287-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3287-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 38186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-38186/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 38212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3281-1	PH07	Total/NA	Solid	8021B	38105
890-3281-2	PH07	Total/NA	Solid	8021B	38105
890-3281-3	PH07	Total/NA	Solid	8021B	38105
MB 880-38105/5-A	Method Blank	Total/NA	Solid	8021B	38105
MB 880-38186/5-A	Method Blank	Total/NA	Solid	8021B	38186
LCS 880-38105/1-A	Lab Control Sample	Total/NA	Solid	8021B	38105
LCSD 880-38105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38105
890-3287-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	38105
890-3287-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38105

Analysis Batch: 38357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3281-1	PH07	Total/NA	Solid	Total BTEX	
890-3281-2	PH07	Total/NA	Solid	Total BTEX	
890-3281-3	PH07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3281-1	PH07	Total/NA	Solid	8015NM Prep	
890-3281-2	PH07	Total/NA	Solid	8015NM Prep	
890-3281-3	PH07	Total/NA	Solid	8015NM Prep	
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3281-1	PH07	Total/NA	Solid	8015B NM	38023
890-3281-2	PH07	Total/NA	Solid	8015B NM	38023
890-3281-3	PH07	Total/NA	Solid	8015B NM	38023
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015B NM	38023
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38023

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

GC Semi VOA (Continued)

Analysis Batch: 38137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38023
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38023
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38023

Analysis Batch: 38290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3281-1	PH07	Total/NA	Solid	8015 NM	
890-3281-2	PH07	Total/NA	Solid	8015 NM	
890-3281-3	PH07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3281-1	PH07	Soluble	Solid	DI Leach	
890-3281-2	PH07	Soluble	Solid	DI Leach	
890-3281-3	PH07	Soluble	Solid	DI Leach	
MB 880-38006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3280-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3280-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3281-1	PH07	Soluble	Solid	300.0	38006
890-3281-2	PH07	Soluble	Solid	300.0	38006
890-3281-3	PH07	Soluble	Solid	300.0	38006
MB 880-38006/1-A	Method Blank	Soluble	Solid	300.0	38006
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	300.0	38006
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38006
890-3280-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	38006
890-3280-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38006

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Client Sample ID: PH07

Date Collected: 10/25/22 09:45
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3281-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 06:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38357	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38290	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 03:19	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 21:54	CH	EET MID

Client Sample ID: PH07

Date Collected: 10/25/22 09:50
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3281-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 06:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38357	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38290	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 03:41	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 22:14	CH	EET MID

Client Sample ID: PH07

Date Collected: 10/25/22 10:00
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3281-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38105	10/28/22 13:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	11/01/22 06:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38357	11/01/22 09:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38290	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 04:02	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 22:21	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3281-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3281-1	PH07	Solid	10/25/22 09:45	10/25/22 15:17	1
890-3281-2	PH07	Solid	10/25/22 09:50	10/25/22 15:17	4
890-3281-3	PH07	Solid	10/25/22 10:00	10/25/22 15:17	8

Page 161 of 225

11/1/2022

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057020	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR-007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
PH07	S	10.25.22	945	1'	G	1		X	X	X
PH07	S	10.25.22	950	4'	G	1		X	X	X
PH07	S	10.25.22	1000	8'	G	1		X	X	X

ANALYSIS REQUEST

Parameters

890-3281 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident Number
NAPP2221675703

10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Amanda Stapp	10/25/22 1518			
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Page 19 of 21

Received by OCD: 12/14/2022 7:53:02 PM

Released to Imaging: 1/11/2023 1:59:45 PM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3281-1
SDG Number: 03D2057020

Login Number: 3281
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3281-1
SDG Number: 03D2057020

Login Number: 3281
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3284-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSAU 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
10/31/2022 4:47:51 PM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSAU 2801

Laboratory Job ID: 890-3284-1
SDG: 03D2057020

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Job ID: 890-3284-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3284-1

Receipt
The samples were received on 10/25/2022 3:17 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH08 (890-3284-1), PH08 (890-3284-2) and PH08 (890-3284-3).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3291-A-1-B), (890-3291-A-1-C MS) and (890-3291-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Released to Imaging: 1/11/2023 1:59:45 PM

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Client Sample ID: PH08

Lab Sample ID: 890-3284-1
Matrix: Solid
Date Collected: 10/25/22 10:10
Date Received: 10/25/22 15:17
Sample Depth: 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 14:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 14:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 14:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/30/22 16:11	10/31/22 14:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 14:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/30/22 16:11	10/31/22 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*10/30/22 16:11*	*10/31/22 14:33*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/30/22 16:11*	*10/31/22 14:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/31/22 15:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**56.0**		49.9		mg/Kg			10/31/22 13:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 15:04	10/29/22 23:47	1
Diesel Range Organics (Over C10-C28)	**56.0**		49.9		mg/Kg		10/27/22 15:04	10/29/22 23:47	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 15:04	10/29/22 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*10/27/22 15:04*	*10/29/22 23:47*	*1*
o-Terphenyl	*89*		*70 - 130*	*10/27/22 15:04*	*10/29/22 23:47*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73.0**		4.95		mg/Kg			10/29/22 23:34	1

Client Sample ID: PH08

Lab Sample ID: 890-3284-2
Matrix: Solid
Date Collected: 10/25/22 10:15
Date Received: 10/25/22 15:17
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 14:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 14:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 14:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/30/22 16:11	10/31/22 14:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/30/22 16:11	10/31/22 14:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/30/22 16:11	10/31/22 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*10/30/22 16:11*	*10/31/22 14:54*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Client Sample ID: PH08

Date Collected: 10/25/22 10:15
Date Received: 10/25/22 15:17
Sample Depth: 4

Lab Sample ID: 890-3284-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*10/30/22 16:11*	*10/31/22 14:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/31/22 15:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/31/22 13:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/27/22 15:04	10/30/22 00:08	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/27/22 15:04	10/30/22 00:08	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/27/22 15:04	10/30/22 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*10/27/22 15:04*	*10/30/22 00:08*	*1*
o-Terphenyl	*78*		*70 - 130*	*10/27/22 15:04*	*10/30/22 00:08*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.8**		5.00	mg/Kg			10/29/22 23:41	1

Client Sample ID: PH08

Date Collected: 10/25/22 10:25
Date Received: 10/25/22 15:17
Sample Depth: 8

Lab Sample ID: 890-3284-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 15:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 15:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 15:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 15:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/30/22 16:11	10/31/22 15:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/30/22 16:11	10/31/22 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*10/30/22 16:11*	*10/31/22 15:14*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*10/30/22 16:11*	*10/31/22 15:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			10/31/22 17:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 13:27	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Client Sample ID: PH08

Date Collected: 10/25/22 10:25
Date Received: 10/25/22 15:17
Sample Depth: 8

Lab Sample ID: 890-3284-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 15:04	10/30/22 00:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/27/22 15:04	10/30/22 00:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 15:04	10/30/22 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*10/27/22 15:04*	*10/30/22 00:29*	*1*
o-Terphenyl	*99*		*70 - 130*	*10/27/22 15:04*	*10/30/22 00:29*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.2**		5.00		mg/Kg			10/29/22 23:48	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-20914-A-2-C MS	Matrix Spike	84	100										
880-20914-A-2-D MSD	Matrix Spike Duplicate	85	99										
890-3284-1	PH08	82	100										
890-3284-2	PH08	82	95										
890-3284-3	PH08	85	97										
LCS 880-38186/1-A	Lab Control Sample	79	92										
LCSD 880-38186/2-A	Lab Control Sample Dup	78	91										
MB 880-38186/5-A	Method Blank	110	105										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-3284-1	PH08	86	89										
890-3284-2	PH08	78	78										
890-3284-3	PH08	97	99										
890-3291-A-1-C MS	Matrix Spike	105	175 S1+										
890-3291-A-1-D MSD	Matrix Spike Duplicate	101	169 S1+										
LCS 880-38030/2-A	Lab Control Sample	110	113										
LCSD 880-38030/3-A	Lab Control Sample Dup	104	103										
MB 880-38030/1-A	Method Blank	83	86										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38186/5-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38186

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/30/22 16:11	10/31/22 12:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/30/22 16:11	10/31/22 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*10/30/22 16:11*	*10/31/22 12:23*	*1*

Lab Sample ID: LCS 880-38186/1-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38186

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09449		mg/Kg		94	70 - 130		
Toluene			0.100	0.1036		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09290		mg/Kg		93	70 - 130		
m-Xylene & p-Xylene			0.200	0.1873		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.09541		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-38186/2-A
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38186

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08977		mg/Kg		90	70 - 130	5	35
Toluene			0.100	0.09741		mg/Kg		97	70 - 130	6	35
Ethylbenzene			0.100	0.08724		mg/Kg		87	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1757		mg/Kg		88	70 - 130	6	35
o-Xylene			0.100	0.09083		mg/Kg		91	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 880-20914-A-2-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.09329		mg/Kg		93	70 - 130		
Toluene	<0.00199	U	0.101	0.09323		mg/Kg		92	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

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

Lab Sample ID: 880-20914-A-2-C MS
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethylbenzene	<0.00199	U	0.101	0.08300		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1664		mg/Kg		82	70 - 130		
o-Xylene	<0.00199	U	0.101	0.08979		mg/Kg		89	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-20914-A-2-D MSD
Matrix: Solid
Analysis Batch: 38212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38186

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.08222		mg/Kg		83	70 - 130	13	35
Toluene	<0.00199	U	0.0994	0.08174		mg/Kg		82	70 - 130	13	35
Ethylbenzene	<0.00199	U	0.0994	0.07245		mg/Kg		73	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1450		mg/Kg		72	70 - 130	14	35
o-Xylene	<0.00199	U	0.0994	0.07980		mg/Kg		80	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-38030/1-A
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38030

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 15:04	10/29/22 21:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 15:04	10/29/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 15:04	10/29/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*10/27/22 15:04*	*10/29/22 21:37*	*1*
o-Terphenyl	*86*		*70 - 130*	*10/27/22 15:04*	*10/29/22 21:37*	*1*

Lab Sample ID: LCS 880-38030/2-A
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38030

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	820.2		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1025		mg/Kg		102	70 - 130		

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

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

Lab Sample ID: LCS 880-38030/2-A
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38030

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-38030/3-A
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38030

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	811.4		mg/Kg		81	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	945.5		mg/Kg		95	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 890-3291-A-1-C MS
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	321		998	1085		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)	5750		998	6103	4	mg/Kg		35	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	175	S1+	70 - 130

Lab Sample ID: 890-3291-A-1-D MSD
Matrix: Solid
Analysis Batch: 38135

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	321		998	1054		mg/Kg		74	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	5750		998	5872	4	mg/Kg		12	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	169	S1+	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38006/1-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/29/22 20:55	1

Lab Sample ID: LCS 880-38006/2-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	261.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38006/3-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3283-A-1-B MS
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	35.5		253	312.1		mg/Kg		110	90 - 110		

Lab Sample ID: 890-3283-A-1-C MSD
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	35.5		253	311.9		mg/Kg		109	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

GC VOA

Prep Batch: 38186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3284-1	PH08	Total/NA	Solid	5035	
890-3284-2	PH08	Total/NA	Solid	5035	
890-3284-3	PH08	Total/NA	Solid	5035	
MB 880-38186/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38186/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38186/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20914-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-20914-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3284-1	PH08	Total/NA	Solid	8021B	38186
890-3284-2	PH08	Total/NA	Solid	8021B	38186
890-3284-3	PH08	Total/NA	Solid	8021B	38186
MB 880-38186/5-A	Method Blank	Total/NA	Solid	8021B	38186
LCS 880-38186/1-A	Lab Control Sample	Total/NA	Solid	8021B	38186
LCSD 880-38186/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38186
880-20914-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	38186
880-20914-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38186

Analysis Batch: 38312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3284-1	PH08	Total/NA	Solid	Total BTEX	
890-3284-2	PH08	Total/NA	Solid	Total BTEX	
890-3284-3	PH08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3284-1	PH08	Total/NA	Solid	8015NM Prep	
890-3284-2	PH08	Total/NA	Solid	8015NM Prep	
890-3284-3	PH08	Total/NA	Solid	8015NM Prep	
MB 880-38030/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38030/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38030/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3291-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3291-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3284-1	PH08	Total/NA	Solid	8015B NM	38030
890-3284-2	PH08	Total/NA	Solid	8015B NM	38030
890-3284-3	PH08	Total/NA	Solid	8015B NM	38030
MB 880-38030/1-A	Method Blank	Total/NA	Solid	8015B NM	38030
LCS 880-38030/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38030
LCSD 880-38030/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38030
890-3291-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38030
890-3291-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38030

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

GC Semi VOA

Analysis Batch: 38278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3284-1	PH08	Total/NA	Solid	8015 NM	
890-3284-2	PH08	Total/NA	Solid	8015 NM	
890-3284-3	PH08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3284-1	PH08	Soluble	Solid	DI Leach	
890-3284-2	PH08	Soluble	Solid	DI Leach	
890-3284-3	PH08	Soluble	Solid	DI Leach	
MB 880-38006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3283-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3283-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3284-1	PH08	Soluble	Solid	300.0	38006
890-3284-2	PH08	Soluble	Solid	300.0	38006
890-3284-3	PH08	Soluble	Solid	300.0	38006
MB 880-38006/1-A	Method Blank	Soluble	Solid	300.0	38006
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	300.0	38006
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38006
890-3283-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	38006
890-3283-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38006

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Client Sample ID: PH08
Date Collected: 10/25/22 10:10
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3284-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 14:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38312	10/31/22 15:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38278	10/31/22 13:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38030	10/27/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38135	10/29/22 23:47	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 23:34	CH	EET MID

Client Sample ID: PH08
Date Collected: 10/25/22 10:15
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3284-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 14:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38312	10/31/22 15:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38278	10/31/22 13:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38030	10/27/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38135	10/30/22 00:08	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 23:41	CH	EET MID

Client Sample ID: PH08
Date Collected: 10/25/22 10:25
Date Received: 10/25/22 15:17

Lab Sample ID: 890-3284-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	38186	10/30/22 16:11	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38212	10/31/22 15:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38312	10/31/22 17:34	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38278	10/31/22 13:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38030	10/27/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38135	10/30/22 00:29	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 23:48	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3284-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3284-1	PH08	Solid	10/25/22 10:10	10/25/22 15:17	1
890-3284-2	PH08	Solid	10/25/22 10:15	10/25/22 15:17	4
890-3284-3	PH08	Solid	10/25/22 10:25	10/25/22 15:17	8

Page 182 of 225

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	
Project Number:	03D2057020	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	IR#007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.6	
Total Containers:		Corrected Temperature:	1.4	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
PH08	S	10.25.22	1010	1'	G	1		X	X	X
PH08	S	10.25.22	1015	4'	G	1		X	X	X
PH08	S	10.25.22	1025	8'	G	1		X	X	X

890-3284 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident Number
NAPP2221675703

10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.25.22 1517			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 12/14/2022 7:53:02 PM
Released to Imaging: 1/11/2023 1:59:45 PM
10/31/2022

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3284-1
SDG Number: 03D2057020

Login Number: 3284
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3284-1
SDG Number: 03D2057020

Login Number: 3284
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3283-1
Laboratory Sample Delivery Group: 03D2057020
Client Project/Site: EVGSAU 2801

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
10/31/2022 1:18:43 PM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: EVGSAU 2801

Laboratory Job ID: 890-3283-1
SDG: 03D2057020

Table of Contents

Eurofins Carlsbad
10/31/2022

Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Job ID: 890-3283-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3283-1

Receipt
The samples were received on 10/25/2022 3:28 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH09 (890-3283-1), PH09 (890-3283-2) and PH09 (890-3283-3).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-38024/2-A) and (LCSD 880-38024/3-A). Evidence of matrix interferences is not obvious.

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

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

Released to Imaging: 1/11/2023 1:59:45 PM

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Client Sample ID: PH09

Lab Sample ID: 890-3283-1
Matrix: Solid
Date Collected: 10/25/22 10:35
Date Received: 10/25/22 15:28
Sample Depth: 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/28/22 14:11	10/31/22 01:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/28/22 14:11	10/31/22 01:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/28/22 14:11	10/31/22 01:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/28/22 14:11	10/31/22 01:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/22 14:11	10/31/22 01:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/28/22 14:11	10/31/22 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*10/28/22 14:11*	*10/31/22 01:49*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*10/28/22 14:11*	*10/31/22 01:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 13:59	10/29/22 14:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/27/22 13:59	10/29/22 14:51	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 13:59	10/29/22 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*10/27/22 13:59*	*10/29/22 14:51*	*1*
o-Terphenyl	*97*		*70 - 130*	*10/27/22 13:59*	*10/29/22 14:51*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.5**		5.05		mg/Kg			10/29/22 22:48	1

Client Sample ID: PH09

Lab Sample ID: 890-3283-2
Matrix: Solid
Date Collected: 10/25/22 10:40
Date Received: 10/25/22 15:28
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/31/22 02:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/31/22 02:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/31/22 02:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/28/22 14:11	10/31/22 02:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/31/22 02:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/28/22 14:11	10/31/22 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*10/28/22 14:11*	*10/31/22 02:09*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Client Sample ID: PH09

Date Collected: 10/25/22 10:40
Date Received: 10/25/22 15:28
Sample Depth: 4

Lab Sample ID: 890-3283-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*10/28/22 14:11*	*10/31/22 02:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/22 13:59	10/29/22 15:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/22 13:59	10/29/22 15:12	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/22 13:59	10/29/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/27/22 13:59*	*10/29/22 15:12*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/27/22 13:59*	*10/29/22 15:12*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**415**		4.98	mg/Kg			10/29/22 23:08	1

Client Sample ID: PH09

Date Collected: 10/25/22 10:50
Date Received: 10/25/22 15:28
Sample Depth: 8

Lab Sample ID: 890-3283-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/28/22 14:11	10/31/22 02:30	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/28/22 14:11	10/31/22 02:30	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/28/22 14:11	10/31/22 02:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/28/22 14:11	10/31/22 02:30	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/28/22 14:11	10/31/22 02:30	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/28/22 14:11	10/31/22 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*10/28/22 14:11*	*10/31/22 02:30*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/28/22 14:11*	*10/31/22 02:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 13:36	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Client Sample ID: PH09

Date Collected: 10/25/22 10:50
Date Received: 10/25/22 15:28
Sample Depth: 8

Lab Sample ID: 890-3283-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 13:59	10/29/22 15:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/27/22 13:59	10/29/22 15:34	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 13:59	10/29/22 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*10/27/22 13:59*	*10/29/22 15:34*	*1*
o-Terphenyl	*98*		*70 - 130*	*10/27/22 13:59*	*10/29/22 15:34*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**192**		5.05		mg/Kg			10/29/22 23:14	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3280-A-1-E MS	Matrix Spike	86	100
890-3280-A-1-F MSD	Matrix Spike Duplicate	87	106
890-3283-1	PH09	117	106
890-3283-2	PH09	125	107
890-3283-3	PH09	119	100
LCS 880-38106/1-A	Lab Control Sample	91	101
LCSD 880-38106/2-A	Lab Control Sample Dup	93	100
MB 880-37947/5-A	Method Blank	96	91
MB 880-38106/5-A	Method Blank	105	94

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3282-A-1-C MS	Matrix Spike	82	85
890-3282-A-1-D MSD	Matrix Spike Duplicate	99	102
890-3283-1	PH09	85	97
890-3283-2	PH09	91	104
890-3283-3	PH09	86	98
LCS 880-38024/2-A	Lab Control Sample	121	141 S1+
LCSD 880-38024/3-A	Lab Control Sample Dup	127	145 S1+
MB 880-38024/1-A	Method Blank	92	103

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37947/5-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37947

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/26/22 16:25	10/30/22 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/26/22 16:25*	*10/30/22 12:16*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/26/22 16:25*	*10/30/22 12:16*	*1*

Lab Sample ID: MB 880-38106/5-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38106

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/28/22 14:11	10/30/22 23:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:02*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:02*	*1*

Lab Sample ID: LCS 880-38106/1-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38106

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08696		mg/Kg		87	70 - 130		
Toluene			0.100	0.08889		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.08632		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene			0.200	0.1636		mg/Kg		82	70 - 130		
o-Xylene			0.100	0.09346		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-38106/2-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38106

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09188		mg/Kg		92	70 - 130	6	35

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

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

Lab Sample ID: LCSD 880-38106/2-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38106

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09274		mg/Kg		93	70 - 130	4	35
Ethylbenzene			0.100	0.09100		mg/Kg		91	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1709		mg/Kg		85	70 - 130	4	35
o-Xylene			0.100	0.09803		mg/Kg		98	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-3280-A-1-E MS
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.08943		mg/Kg		89	70 - 130
Toluene	<0.00200	U	0.0998	0.09103		mg/Kg		91	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.08402		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1535		mg/Kg		77	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08661		mg/Kg		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-3280-A-1-F MSD
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38106

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08552		mg/Kg		85	70 - 130	4	35
Toluene	<0.00200	U	0.0990	0.08543		mg/Kg		86	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.0990	0.08179		mg/Kg		83	70 - 130	3	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1488		mg/Kg		75	70 - 130	3	35
o-Xylene	<0.00200	U	0.0990	0.08418		mg/Kg		85	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MB 880-38024/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38024

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:59	10/29/22 10:00	1

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

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

Lab Sample ID: MB 880-38024/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38024

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:59	10/29/22 10:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:59	10/29/22 10:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/27/22 13:59*	*10/29/22 10:00*	*1*
o-Terphenyl	*103*		*70 - 130*	*10/27/22 13:59*	*10/29/22 10:00*	*1*

Lab Sample ID: LCS 880-38024/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38024

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1170		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	855.4		mg/Kg		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*141*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-38024/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38024

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1233		mg/Kg		123	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	912.3		mg/Kg		91	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*127*		*70 - 130*
o-Terphenyl	*145*	*S1+*	*70 - 130*

Lab Sample ID: 890-3282-A-1-C MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38024

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	994.7		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	895.0		mg/Kg		88	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*82*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

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

Lab Sample ID: 890-3282-A-1-D MSD
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38024

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	914.9		mg/Kg		90	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1085		mg/Kg		107	70 - 130	19	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38006/1-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/29/22 20:55	1

Lab Sample ID: LCS 880-38006/2-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	261.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38006/3-A
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3283-1 MS
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: PH09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	35.5		253	312.1		mg/Kg		110	90 - 110		

Lab Sample ID: 890-3283-1 MSD
Matrix: Solid
Analysis Batch: 38162

Client Sample ID: PH09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	35.5		253	311.9		mg/Kg		109	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

GC VOA

Prep Batch: 37947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-37947/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 38106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3283-1	PH09	Total/NA	Solid	5035	
890-3283-2	PH09	Total/NA	Solid	5035	
890-3283-3	PH09	Total/NA	Solid	5035	
MB 880-38106/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38106/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38106/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3280-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3280-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3283-1	PH09	Total/NA	Solid	8021B	38106
890-3283-2	PH09	Total/NA	Solid	8021B	38106
890-3283-3	PH09	Total/NA	Solid	8021B	38106
MB 880-37947/5-A	Method Blank	Total/NA	Solid	8021B	37947
MB 880-38106/5-A	Method Blank	Total/NA	Solid	8021B	38106
LCS 880-38106/1-A	Lab Control Sample	Total/NA	Solid	8021B	38106
LCSD 880-38106/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38106
890-3280-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	38106
890-3280-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38106

Analysis Batch: 38259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3283-1	PH09	Total/NA	Solid	Total BTEX	
890-3283-2	PH09	Total/NA	Solid	Total BTEX	
890-3283-3	PH09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3283-1	PH09	Total/NA	Solid	8015NM Prep	
890-3283-2	PH09	Total/NA	Solid	8015NM Prep	
890-3283-3	PH09	Total/NA	Solid	8015NM Prep	
MB 880-38024/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38024/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38024/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3282-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3282-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3283-1	PH09	Total/NA	Solid	8015B NM	38024
890-3283-2	PH09	Total/NA	Solid	8015B NM	38024
890-3283-3	PH09	Total/NA	Solid	8015B NM	38024
MB 880-38024/1-A	Method Blank	Total/NA	Solid	8015B NM	38024
LCS 880-38024/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38024

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

GC Semi VOA (Continued)

Analysis Batch: 38137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-38024/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38024
890-3282-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38024
890-3282-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38024

Analysis Batch: 38284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3283-1	PH09	Total/NA	Solid	8015 NM	
890-3283-2	PH09	Total/NA	Solid	8015 NM	
890-3283-3	PH09	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3283-1	PH09	Soluble	Solid	DI Leach	
890-3283-2	PH09	Soluble	Solid	DI Leach	
890-3283-3	PH09	Soluble	Solid	DI Leach	
MB 880-38006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3283-1 MS	PH09	Soluble	Solid	DI Leach	
890-3283-1 MSD	PH09	Soluble	Solid	DI Leach	

Analysis Batch: 38162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3283-1	PH09	Soluble	Solid	300.0	38006
890-3283-2	PH09	Soluble	Solid	300.0	38006
890-3283-3	PH09	Soluble	Solid	300.0	38006
MB 880-38006/1-A	Method Blank	Soluble	Solid	300.0	38006
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	300.0	38006
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38006
890-3283-1 MS	PH09	Soluble	Solid	300.0	38006
890-3283-1 MSD	PH09	Soluble	Solid	300.0	38006

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Client Sample ID: PH09
Date Collected: 10/25/22 10:35
Date Received: 10/25/22 15:28

Lab Sample ID: 890-3283-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/31/22 01:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38259	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38284	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38024	10/27/22 13:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/29/22 14:51	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 22:48	CH	EET MID

Client Sample ID: PH09
Date Collected: 10/25/22 10:40
Date Received: 10/25/22 15:28

Lab Sample ID: 890-3283-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/31/22 02:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38259	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38284	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38024	10/27/22 13:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/29/22 15:12	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 23:08	CH	EET MID

Client Sample ID: PH09
Date Collected: 10/25/22 10:50
Date Received: 10/25/22 15:28

Lab Sample ID: 890-3283-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/31/22 02:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38259	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38284	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38024	10/27/22 13:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/29/22 15:34	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 23:14	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EVGSAU 2801

Job ID: 890-3283-1
SDG: 03D2057020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3283-1	PH09	Solid	10/25/22 10:35	10/25/22 15:28	1
890-3283-2	PH09	Solid	10/25/22 10:40	10/25/22 15:28	4
890-3283-3	PH09	Solid	10/25/22 10:50	10/25/22 15:28	8

Page 203 of 225

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EVGSAU 2801	Turn Around	
Project Number:	03D2057020	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	WM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.4

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
PH09	S	10.25.22	1035	1'	G	1		X	X	X	
PH09	S	10.25.22	1040	4'	G	1		X	X	X	
PH09	S	10.25.22	1050	8'	G	1		X	X	X	

Parameters

890-3283 Chain of Custody

Incident Number
NAPP2221675703

10.25.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.25.22 1514			
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Page 19 of 21

10/31/2022

Received by OCD: 12/14/2022 7:53:02 PM

Released to Imaging: 1/11/2023 1:59:45 PM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3283-1
SDG Number: 03D2057020

Login Number: 3283
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3283-1
SDG Number: 03D2057020

Login Number: 3283
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

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

ENSOLUM

APPENDIX C

Lithologic / Sampling Logs

ENSOLUM

	Sample Name: PH01	Date: 10-24-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Y	4468	3.3	Y			1'	SP-SM	SAND, well graded, dark brown, med-coarse grained
N	3158	4.7	N	PH01	2'	2'	CCHE	CALICHE
N	224	6.4	N			3'	CCHE	CALICHE
N	67	3.3	N	PH01A	4'	4'	CCHE	CALICHE

ENSOLUM	Sample Name: PH02	Date: 10-24-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Y	4860	1.3	Y	PH02	1'	1'	SP-SM	SAND, well graded, dark brown, med-coarse grained
N	666.4	1.3	N			2'	CCHE	CALICHE
N	196	5.6	N	PH02A	3'	3'	CCHE	CALICHE
N	ND	13.7	N			4'	CCHE	CALICHE

ENSOLUM

	Sample Name: PH03	Date: 10-24-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Y	4030	4.6	Y	PH03	1'	1'	SP-SM	SAND, well graded, dark brown, med-coarse grained
N	2934	2.5	N			2'	SP-SM	SAND, dark brown, well graded, mud-coarse grain, mixed caliche
N	ND	1.3	N			3'	CCHE	CALICHE
N	2350	1.5	N	PH03A	4'	4'	CCHE	CALICHE

ENSOLUM	Sample Name: PH04	Date: 10-24-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 8'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Y	10841	4.6	Y	PH04	1'	1'	SP-SM	SAND, well graded, dark brown, med-coarse grained
N	3404	2.6	N			2'	SP-SM	SAND/ CALICHE mix, dark brown/ dark tan, well graded, mud-coarse grain
N	2553	2	N			3'	CCHE	CALICHE
N	2480	1.7	N	PH04A	4'	4'	CCHE	CALICHE
N	1204	2.2	N			6'	CCHE	CALICHE
N	2385	1.9	N			7'	CCHE	CALICHE
N	75	0.3	N	PH04B	8'	8'	CCHE	CALICHE

ENSOLUM	Sample Name: PH05	Date: 10-24-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Y	2833	1.5	Y	PH05	1'	1'	SP-SM	SAND, well graded, dark brown, mud-coarse grained
N	2055	2.7	N			2'	SP-SM	SAA
N	487	2.1	N			3'	SP-SM	SAA
N	56	1	N	PH05A	4'	4'	SP-SM	SAA

ENSOLUM

	Sample Name: PH06	Date: 10-25-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 8'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
N	29	0.9	N	PH06	1'	1'	SP-SM	SAND, well graded, dark brown, mud-coarse grained, some caliche
N	24	1.3	N	PH06A	4'	4'	CCHE	CALICHE
N	18	1.7	N	PH06B	8'	8'	CCHE	CALICHE

ENSOLUM	Sample Name: PH07	Date: 10-25-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 8'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
N	36	1.8	N	PH07	1'	1'	SP-SM	SAND/ CALICHE mix, well graded, dark brown, mud- coarse grained
N	15	0.5	N	PH07A	4'	4'	CCHE	CALICHE
N	39	0.7	N	PH07B	8'	8'	CCHE	CALICHE

ENSOLUM	Sample Name: PH08	Date: 10-25-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 8'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
N	73	4.8	N	PH08	1'	1'	SP-SM	SAND, well graded, dark brown, mud-coarse grained
N	21	3.5	N	PH08A	4'	4'	SP-SC	SAND, tan/ brown, poorly graded, some caliche mix
N	20	1.5	N	PH08B	8'	8'	CCHE	CALICHE

ENSOLUM	Sample Name: PH09	Date: 10-25-2022
	Site Name: EVGSAU 2801	
	Incident Number: NAPP2221675703	
	Job Number: 03D2057020	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: Backhoe
Coordinates: 32.80302, -103.45896	Hole Diameter:	Total Depth: 8'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
N	36	1.1	N	PH09	1'	1'	SP-SM	SAND, well graded, dark brown, mud-coarse grained
N	415	1.2	N	PH09A	4'	4'	CCHE	CALICHE
N	192	1.1	N	PH09B	8'	8'	CCHE	CALICHE

ENSOLUM

APPENDIX D

NMOCD Notifications

From: OCDOnline@state.nm.us
To: Kalei Jennings
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 140652
Date: Friday, September 9, 2022 11:40:00 AM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Kalei Jennings for Maverick Permian LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2221675703, with the following conditions:

- **Remediation Plan Approved.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Jennifer Nobui
Environmental Specialist-Advanced
505-470-3407
Jennifer.Nobui@state.nm.us

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

ENSOLUM

APPENDIX E

Final C-141

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAPP2221675703
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Maverick Permian, LLC	OGRID: 331199
Contact Name: Thomas Haigood	Contact Telephone: (432) 701-7802
Contact email: Thomas.haigood@mavresources.com	Incident # *(assigned by OCD)*
Contact mailing address: 5735 SW 7000, Andrews, TX 79714	

Location of Release Source

Latitude: 32.80302 Longitude: -103.45896
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: East Vacuum Grayburg – San Andreas Unit #010	Site Type: Flow line - Pasture
Date Release Discovered: June 06, 2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
SW-SE	28	17S	35E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released: **2 bbl.**	Volume Recovered: **1 bbl.**
☒ Produced Water	Volume Released: **35 bbl.**	Volume Recovered: **19 bbl.**
	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 90 degree steel flow line riser developed a hole due to possible inner corrosion, This allowed approximately 37 bbl. of production fluid to spill onto the ground over the course of a couple hours ultimately covering an area of 60 ft. by 75 ft. in the pasture before being isolated.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2221675703
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? **The calculated total volume released was over 25 bbl. total production fluid.**

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc):
Contact was attempted by phone by calling (575) 626-0830 and I left a message. I then emailed OCD.Enviro@state.NM.us at 1:55pm (TX) on June 12th, 2022and made notification.

Initial Response

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

☒ The source of the release has been stopped.
☒ 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:

The release has been stopped and the total area of saturation has been barricaded. No more fluid will spread further. The ruptured line will be repaired and the saturated area will be remediated in accordance with NMOCD EMNRD guidelines

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.

Printed Name: **Thomas Haigood**
Title: **Permian HSE Specialist**

Signature: *Thomas James Haigood*
Date: **June 06, 2022**

email: **Thomas.haigood@mavresources.com**
Telephone: **(432) 701-7802**

OCD Only

Received by: Jocelyn Harimon
Date: 08/05/2022

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: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 131744
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141	8/5/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2221675703
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	50-100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ 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
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2221675703
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: ___Bryce Wagoner_____ Title: _Permian HSE Specialist II_____

Signature:_____ _____ Date: __12/14/2022_____

email: _bryce.wagoner@mavresources.com _____ Telephone: ___928-241-1862_____

OCD Only

Received by: ___Jocelyn Harimon_____ Date: ____12/15/2022__

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2221675703
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: ___Bryce Wagoner_____ Title: __Permian HSE Specialist II_____

Signature: _____ Date: __12/14/2022_____

email: __bryce.wagoner@mavresources.com_____ Telephone: __928-241-1862_____

OCD Only

Received by: Jocelyn Harimon Date: 12/15/2022

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Jennifer Nobui Date: 01/11/2023

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

Action 167177

CONDITIONS

Operator: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 167177
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Variance approved to collect sidewall confirmation soil samples at 400 ft2.	1/11/2023