



April 14, 2023

New Mexico Oil Conservation Division

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

**Re: Closure Request
MCA Unit #145
Incident Number NAPP2229469315
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Permian, LLC (Maverick), has prepared this *Closure Request* to document excavation and soil sampling activities performed at the MCA Unit #145 (Site) as outlined in an approved *Remediation Work Plan (Work Plan)*, dated January 18, 2023. Based on the results presented in this report, Maverick is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2229469315.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit H, Section 27, Township 17 South, Range 32 East, in Lea County, New Mexico (32.805570°, -103.748544°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On October 14, 2022, corrosion on an injection line ruptured, resulting in the release of 39.16 barrels (bbls) of crude oil and 254.24 bbls of produced water into the pasture. Approximately 21.16 bbls of crude oil and 238.84 bbls of produced water were recovered. Ensolum, on behalf of Maverick, reported the incident to the New Mexico Oil Conservation Division (NMOCD) on October 15, 2022. Maverick reported the spill to the NMOCD via a Release Notification Form C-141 (Form C-141) on October 21, 2022. The release was assigned Incident Number NAPP2229469315.

Between October 21 and October 31, 2022, delineation activities were conducted at the Site to assess the lateral and vertical extent of impacted soil. Delineation soil samples were collected at depths ranging from 1-foot to 18 feet below ground surface (bgs) in locations depicted on Figure 2. Field screening and laboratory analytical results indicated elevated chloride concentrations existed in the top 4 feet bgs of the release area. As a result, Maverick submitted the *Work Plan* and proposed excavation and disposal of impacted soil from the top 4 feet of the subsurface, confirmation sampling every 400 square feet of the floor of the excavation and every 200 square feet of the sidewalls of the excavation.

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The *Work Plan* was approved by the NMOCD on February 9, 2023 via email with the following conditions:

Remediation Plan Approved with Conditions. The depth to groundwater has not been adequately determined for the least stringent criteria (20,000 mg/kg chloride). When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. OCD will accept dtw 51-100' and 10,000 mg/kg chloride. Please ensure your remediation efforts reflect the accepted criteria. Composite confirmation samples will be collected from the bottom of the excavation from areas representing no more than four hundred (400) square feet. Composite confirmation samples will be collected from the sidewalls of the excavation from areas representing no more than two hundred (200) square feet.

What follows is a description of work completed in compliance with these conditions and the approved *Work Plan*.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As documented in the *Work Plan*, the following NMOCD Table I Closure Criteria (Closure Criteria) apply (Figure 1):

- 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 diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 10,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area per Title 19, Chapter 15, Part 29, Section 13.D (19.15.29.13.D) of the New Mexico Administrative Code (NMAC) for the top 4 feet of areas that will be reclaimed following remediation.

EXCAVATION AND SOIL SAMPLING ACTIVITIES

Between March 14, 2023 and March 20, 2023, Ensolum personnel were onsite to oversee excavation activities as detailed in the approved *Work Plan*. Excavation activities were performed via track-hoe and transport vehicles. To direct excavation activities, soil was field screened for volatile organic compounds (VOCs) with a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. Photographic documentation is included in Appendix A.

Following removal of impacted soil, 5-point composite excavation confirmation soil samples were collected every 400 square feet from the floor of the excavation and every 200 square feet from the sidewalls of the excavation. The excavation confirmation samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Excavation confirmation soil samples FS01 through FS34 were collected from the floor of the excavation at a depth of 4 feet bgs. Composite soil samples SW01 through SW18 were collected from the sidewalls of the excavation at depths ranging from the ground surface to a maximum



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4 feet bgs. The excavation extent and excavation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 3.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following constituents of concern (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 confirmation soil samples FS01 through FS10, FS12 through FS14, FS16, FS18, FS20 through FS29, FS31, and SW01 through SW18 indicated all COC concentrations were compliant with the Closure Criteria and reclamation requirement. Laboratory analytical results for confirmation soil samples FS11, FS15, FS17, FS19, FS30, and FS32 through FS34 indicated chloride concentrations exceeded the Closure Criteria. Laboratory analytical results are provided on Table 1 and laboratory analytical reports are included as Appendix B.

ADDITIONAL EXCAVATION AND SOIL SAMPLING ACTIVITIES

On April 6, 2023, Ensolum personnel returned to the Site to oversee additional excavation activities as warranted by laboratory analytical results for soil samples FS11, FS15, FS17, FS19, FS30, and FS32 through FS34. Excavation activities were resumed via track-hoe and transport vehicles. To direct excavation activities, soil was field screened for VOCs and chloride as previously described. Photographic documentation is included in Appendix A.

Following further removal of impacted soil, 5-point composite excavation confirmation soil samples were collected every 400 square feet from the freshly excavated floor of the excavation. Excavation confirmation soil samples FS11A, FS15A, FS17A, FS19A, FS30A, and FS32A through FS34A were collected from the floor of the excavation at a depth of 4.25 feet bgs. The excavation confirmation soil samples Handled and analyzed as described above. The final excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 3.

The excavation measured approximately 13,110 square feet in areal extent and approximately 4.25 feet bgs in depth. A total of approximately 2,063 cubic yards of impacted soil were removed during the excavation activities. The soil was transported from the Site and properly disposed of at the R360 Environmental Solutions in Hobbs, New Mexico.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for excavation soil samples FS11A, FS15A, FS17A, FS19A, FS30A, and FS32A through FS34A indicated all COC concentrations were compliant with Closure Criteria. Laboratory analytical results are provided on Table 1 and laboratory analytical reports are included as Appendix B.

CLOSURE REQUEST

Remediation activities were conducted as approved in the *Work Plan along with NMOCD's conditions*. Laboratory analytical results for the final excavation confirmation soil samples indicated all COC concentrations were compliant with the Closure Criteria and reclamation requirement. The release was delineated laterally by the final excavation sidewall samples. Maverick believes the remediation actions described above is protective of human health, the environment, groundwater, and other sensitive



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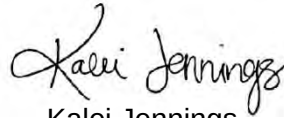
receptors. As such, Maverick respectfully requests closure for Incident Number NAPP2229469315. The Final C-141 is included as Appendix C.

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

Sincerely,
Ensolum, LLC



Hadlie Green
Project Geologist



Kalei Jennings
Senior Scientist

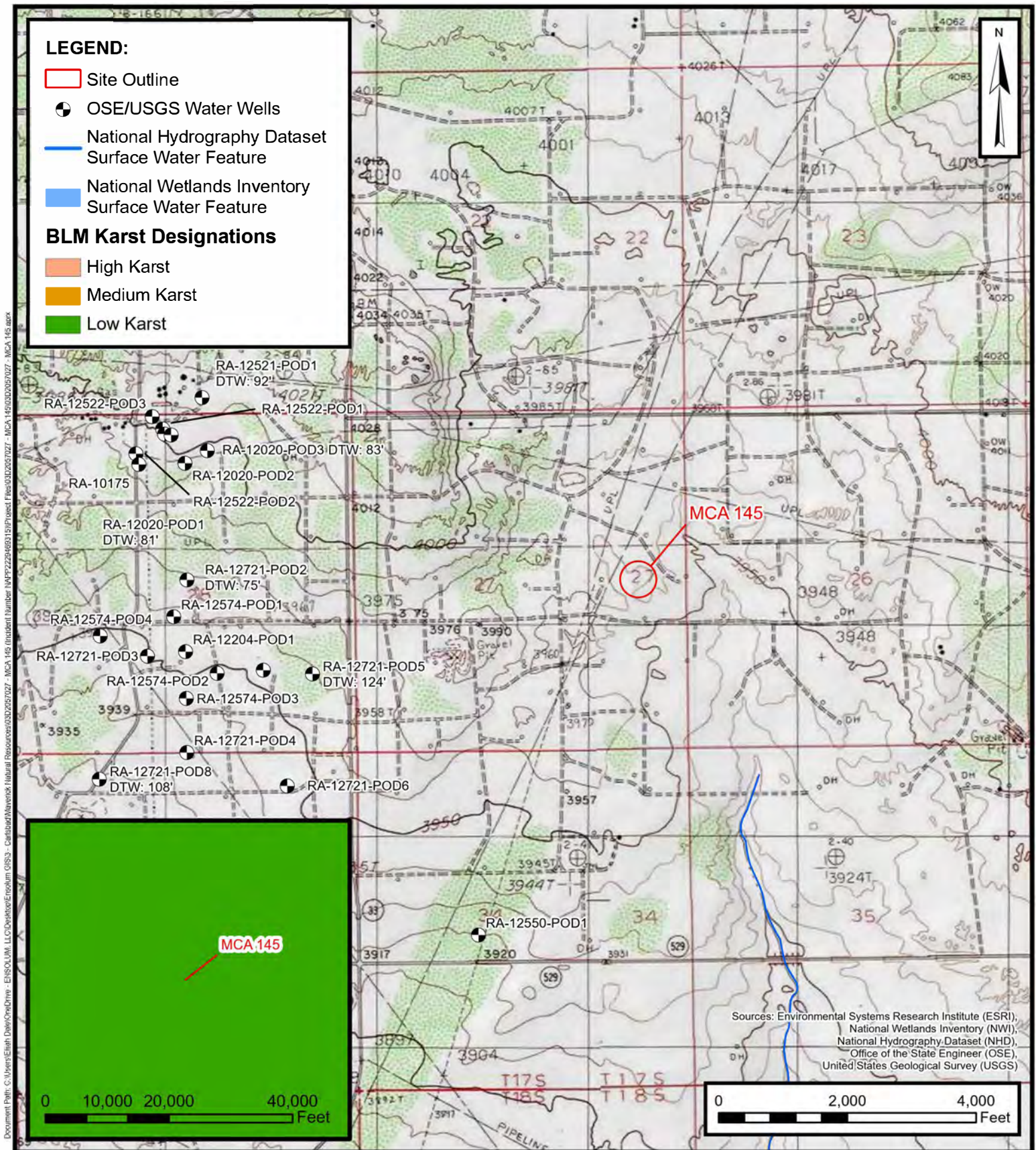
cc: Bryce Wagoner, Maverick Permian, LLC
Bureau of Land Management

Appendices:

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



FIGURES



Site Receptor Map

Maverick Permian, LLC
MCA Unit #145
Incident Number: NAPP2229469315
Unit H Sec 27 T17S R32E
Lea County, New Mexico

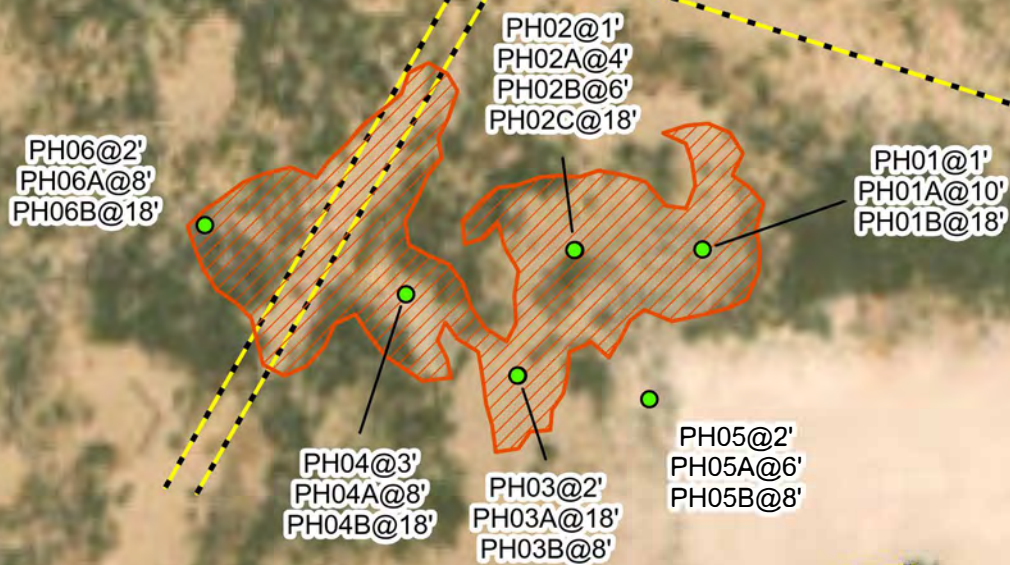
FIGURE

1

Document Path: C:\Users\Eliah.Dave\OneDrive - ENSOLUM, LLC\Desktop\Enslum GIS\3 - Calibrated\Haverock\Natural Resources\0302057027 - MCA 145 Incident Number NAPP2229469315\Project Files\0302057027 - MCA 145.aprx

LEGEND:

- Delineation Soil Sample in Compliance with Applicable Closure Criteria
- Release Extent
- - - Approximate Pipeline Location



Sources: Environmental Systems Research Institute (ESRI),
National Wetlands Inventory (NWI),
National Hydrography Dataset (NHD),
Office of the State Engineer (OSE),
United States Geological Survey (USGS)

NOTES:
Sample ID @ Depth Below Ground Surface

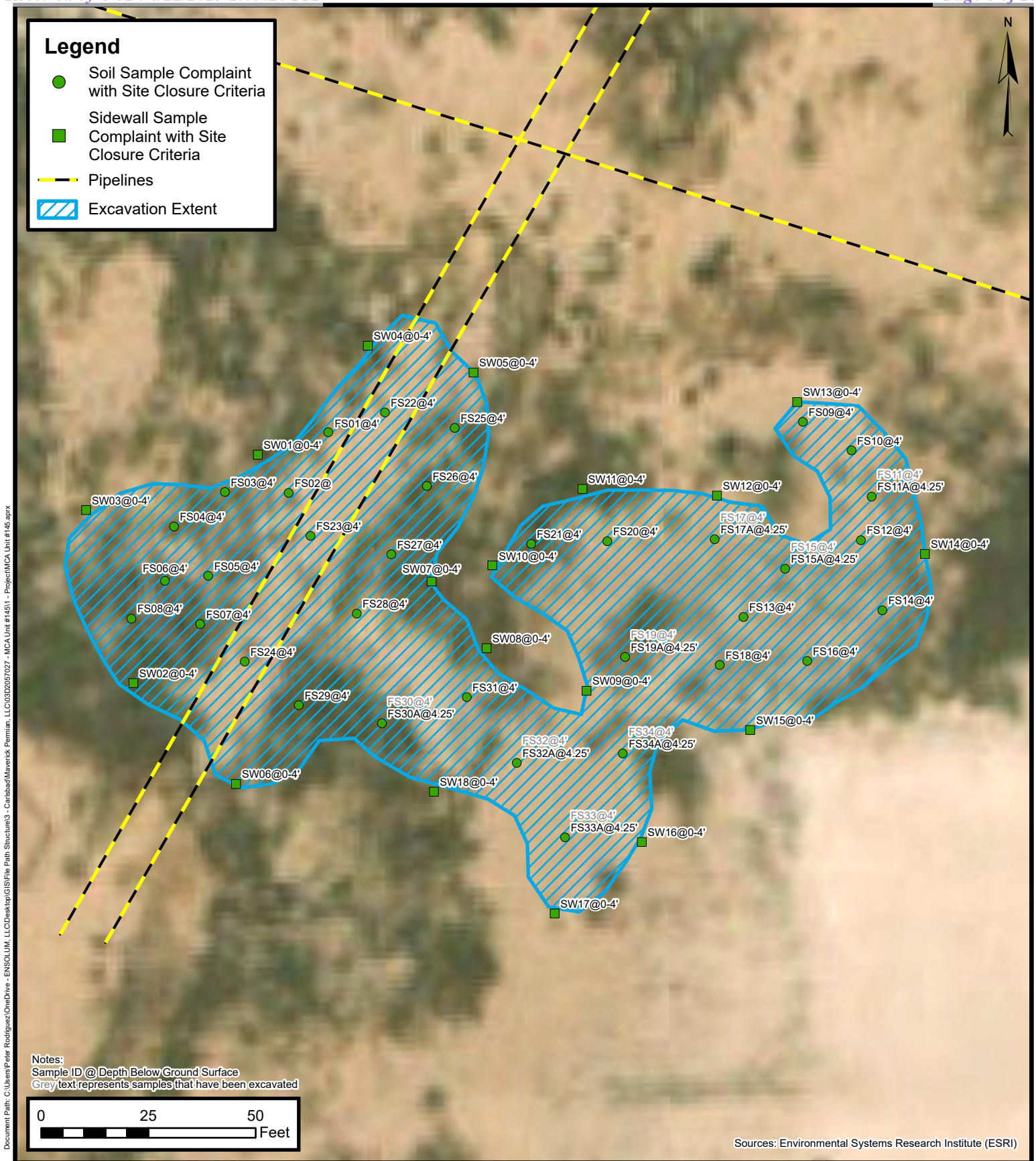
0 60 120
Feet

Delineation Soil Samples

Maverick Permian, LLC
MCA Unit #145
Incident Number: NAPP2229469315
Unit H Sec 27 T17S R32E
Lea County, New Mexico

FIGURE
2





Excavation Soil Samples

Maverick Permian, LLC
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 Incident Number: NAPP2229469315
 Unit H Sec 27 T17S R32E
 Lea County, New Mexico

FIGURE
3



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
MCA Unit #145
Maverick Permian, LLC
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Excavation Floor Soil Samples										
FS01	03/14/2023	4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	3,650
FS02	03/14/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	4,300
FS03	03/14/2023	4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,380
FS04	03/14/2023	4'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,630
FS05	03/14/2023	4'	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	5,730
FS06	03/14/2023	4'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	4,720
FS07	03/14/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	8,950
FS08	03/14/2023	4'	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	7,200
FS09	03/15/2023	4'	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	2,390
FS10	03/15/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,370
FS11	03/15/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	10,200
FS11A	04/06/2023	4.25'	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,580
FS12	03/15/2023	4'	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	5,190
FS13	03/15/2023	4'	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	9,720
FS14	03/15/2023	4'	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	466
FS15	03/15/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	11,500
FS15A	04/06/2023	4.25'	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,040
FS16	03/15/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	3,990
FS17	03/15/2023	4'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	13,800
FS17A	04/06/2023	4.25'	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,000
FS18	03/15/2023	4'	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	703

FS19	03/15/2023	4'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	14,800
FS19A	04/06/2023	4.25'	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,400
FS20	03/15/2023	4'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	4,090
FS21	03/15/2023	4'	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	9,840
FS22	03/16/2023	4'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	473
FS23	03/16/2023	4'	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	158
FS24	03/16/2023	4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,120
FS25	03/17/2023	4'	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	268
FS26	03/17/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	430
FS27	03/17/2023	4'	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	7,750
FS28	03/17/2023	4'	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	5,610
FS29	03/17/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	8,180
FS30	03/20/2023	4'	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	13,700
FS30A	04/06/2023	4.25'	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,280
FS31	03/20/2023	4'	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	7,450
FS32	03/20/2023	4'	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	13,800
FS32A	04/06/2023	4.25'	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,400
FS33	03/20/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	22,600
FS33A	04/06/2023	4.25'	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,410
FS34	03/20/2023	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	11,200
FS34A	04/06/2023	4.25'	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	4,960
Excavation Sidewall Soil Samples										
SW01	03/14/2023	0 - 4'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	61.0
SW02	03/14/2023	0 - 4'	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	16.0
SW03	03/14/2023	0 - 4'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	13.5
SW04	03/17/2023	0 - 4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	108
SW05	03/17/2023	0 - 4'	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	49.5
SW06	03/17/2023	0 - 4'	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	37.6
SW07	03/15/2023	0 - 4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	152
SW08	03/15/2023	0 - 4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	142
SW09	03/15/2023	0 - 4'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	134

SW10	03/15/2023	0 - 4'	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	126
SW11	03/15/2023	0 - 4'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	128
SW12	03/15/2023	0 - 4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	129
SW13	03/15/2023	0 - 4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	204
SW14	03/20/2023	0 - 4'	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	59.9
SW15	03/20/2023	0 - 4'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	108
SW16	03/20/2023	0 - 4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	70.0
SW17	03/20/2023	0 - 4'	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	103
SW18	03/20/2023	0 - 4'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	39.1

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

Grey text represents samples that have been excavated



APPENDIX A

Photographic Log



Photographic Log

Maverick Permian, LLC

MCA Unit #145

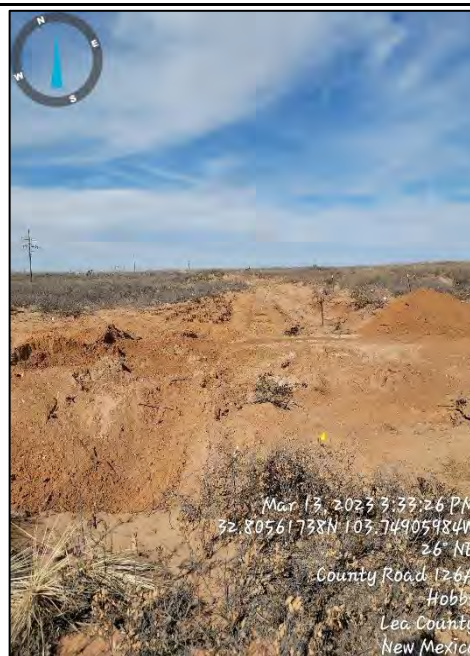
NAPP2229469315



Photograph 1

Date: 03/13/2023

Description: Excavation activities



Photograph 2

Date: 03/13/2023

Description: Excavation activities



Photograph 3

Date: 03/14/2023

Description: Excavation activities



Photograph 4

Date: 03/14/2023

Description: Excavation activities



Photographic Log

Maverick Permian, LLC

MCA Unit #145

NAPP2229469315



Photograph 1

Date: 03/15/2023

Description: Excavation activities



Photograph 2

Date: 03/17/2023

Description: Excavation activities



Photograph 3

Date: 03/17/2023

Description: Excavation extent



Photograph 4

Date: 03/17/2023

Description: Excavation extent



APPENDIX B

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 3/27/2023 9:54:04 AM

JOB DESCRIPTION

MCA 145/Maverick

SDG NUMBER 03D2057027

JOB NUMBER

890-4310-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
3/27/2023 9:54:04 AM

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

Client: Ensolum
Project/Site: MCA 145/Maverick

Laboratory Job ID: 890-4310-1
SDG: 03D2057027

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Definitions/Glossary

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Job ID: 890-4310-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4310-1

Receipt

The samples were received on 3/14/2023 4:17 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 1.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-4310-1), FS02 (890-4310-2), FS04 (890-4310-3), FS06 (890-4310-4), FS08 (890-4310-5), FS03 (890-4310-6), FS05 (890-4310-7), FS07 (890-4310-8), SW01 (890-4310-9), SW02 (890-4310-10) and SW03 (890-4310-11).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-48884 and analytical batch 880-48908 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-48884/2-A) and (LCSD 880-48884/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-48884 and analytical batch 880-48908 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48967 and 880-48967 and analytical batch 880-49323 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: FS02 (890-4310-2), FS04 (890-4310-3), FS06 (890-4310-4), FS08 (890-4310-5), FS03 (890-4310-6), FS05 (890-4310-7), FS07 (890-4310-8), SW01 (890-4310-9), SW02 (890-4310-10), SW03 (890-4310-11), (890-4310-A-2-C MS) and (890-4310-A-2-D MSD).

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: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS01

Lab Sample ID: 890-4310-1

Date Collected: 03/14/23 11:20

Matrix: Solid

Date Received: 03/14/23 16:17

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		03/24/23 10:36	03/26/23 14:46	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 14:46	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 14:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 10:36	03/26/23 14:46	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 14:46	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 10:36	03/26/23 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	03/24/23 10:36	03/26/23 14:46	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/24/23 10:36	03/26/23 14:46	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 14:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		03/18/23 09:50	03/19/23 14:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/18/23 09:50	03/19/23 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/18/23 09:50	03/19/23 14:25	1
o-Terphenyl	107		70 - 130	03/18/23 09:50	03/19/23 14:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3650		25.0	mg/Kg			03/22/23 22:08	5

Client Sample ID: FS02

Lab Sample ID: 890-4310-2

Date Collected: 03/14/23 11:25

Matrix: Solid

Date Received: 03/14/23 16:17

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		03/24/23 10:36	03/26/23 15:06	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 15:06	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 15:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 10:36	03/26/23 15:06	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 15:06	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 10:36	03/26/23 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/24/23 10:36	03/26/23 15:06	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS02

Lab Sample ID: 890-4310-2

Date Collected: 03/14/23 11:25

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130	03/24/23 10:36	03/26/23 15:06	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 14:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		03/18/23 09:50	03/19/23 14:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/18/23 09:50	03/19/23 14:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			03/18/23 09:50	03/19/23 14:47	1
o-Terphenyl	103		70 - 130			03/18/23 09:50	03/19/23 14:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4300	F1	49.7	mg/Kg			03/22/23 22:13	10

Client Sample ID: FS04

Lab Sample ID: 890-4310-3

Date Collected: 03/14/23 11:30

Matrix: Solid

Date Received: 03/14/23 16:17

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		03/24/23 10:36	03/26/23 15:27	1
Toluene	0.00215		0.00200	mg/Kg		03/24/23 10:36	03/26/23 15:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 15:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/24/23 10:36	03/26/23 15:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 15:27	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/24/23 10:36	03/26/23 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/24/23 10:36	03/26/23 15:27	1
1,4-Difluorobenzene (Surr)	99		70 - 130	03/24/23 10:36	03/26/23 15:27	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			03/27/23 10:31	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			03/22/23 17:17	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS04

Lab Sample ID: 890-4310-3

Date Collected: 03/14/23 11:30

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 4'

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		03/18/23 09:50	03/19/23 15:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U **	49.9	mg/Kg		03/18/23 09:50	03/19/23 15:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/18/23 09:50	03/19/23 15:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			03/18/23 09:50	03/19/23 15:09	1
o-Terphenyl	108		70 - 130			03/18/23 09:50	03/19/23 15:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2630		25.1	mg/Kg			03/22/23 22:27	5

Client Sample ID: FS06

Lab Sample ID: 890-4310-4

Date Collected: 03/14/23 11:35

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 4'

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		03/24/23 10:36	03/26/23 15:48	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/24/23 10:36	03/26/23 15:48	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/24/23 10:36	03/26/23 15:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/24/23 10:36	03/26/23 15:48	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/24/23 10:36	03/26/23 15:48	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/24/23 10:36	03/26/23 15:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			03/24/23 10:36	03/26/23 15:48	1
1,4-Difluorobenzene (Surr)	106		70 - 130			03/24/23 10:36	03/26/23 15:48	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 15:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U **	49.9	mg/Kg		03/18/23 09:50	03/19/23 15:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/18/23 09:50	03/19/23 15:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130			03/18/23 09:50	03/19/23 15:31	1
o-Terphenyl	97		70 - 130			03/18/23 09:50	03/19/23 15:31	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS06

Lab Sample ID: 890-4310-4

Date Collected: 03/14/23 11:35

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4720		50.1	mg/Kg			03/22/23 22:32	10

Client Sample ID: FS08

Lab Sample ID: 890-4310-5

Date Collected: 03/14/23 11:40

Matrix: Solid

Date Received: 03/14/23 16:17

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		03/24/23 10:36	03/26/23 16:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 16:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 16:08	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/24/23 10:36	03/26/23 16:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 16:08	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/24/23 10:36	03/26/23 16:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			03/24/23 10:36	03/26/23 16:08	1
1,4-Difluorobenzene (Surr)	106		70 - 130			03/24/23 10:36	03/26/23 16:08	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 16:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		03/18/23 09:50	03/19/23 16:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/18/23 09:50	03/19/23 16:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			03/18/23 09:50	03/19/23 16:15	1
o-Terphenyl	100		70 - 130			03/18/23 09:50	03/19/23 16:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7200		49.5	mg/Kg			03/22/23 22:47	10

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS03

Lab Sample ID: 890-4310-6

Date Collected: 03/14/23 11:45

Matrix: Solid

Date Received: 03/14/23 16:17

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		03/24/23 10:36	03/26/23 16:29	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 16:29	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 16:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 10:36	03/26/23 16:29	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 16:29	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 10:36	03/26/23 16:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/24/23 10:36	03/26/23 16:29	1
1,4-Difluorobenzene (Surr)	108		70 - 130	03/24/23 10:36	03/26/23 16:29	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 16:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		03/18/23 09:50	03/19/23 16:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/18/23 09:50	03/19/23 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	03/18/23 09:50	03/19/23 16:36	1
o-Terphenyl	97		70 - 130	03/18/23 09:50	03/19/23 16:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4380		50.3	mg/Kg			03/22/23 22:52	10

Client Sample ID: FS05

Lab Sample ID: 890-4310-7

Date Collected: 03/14/23 13:00

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 4'

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		03/24/23 10:36	03/26/23 16:49	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/24/23 10:36	03/26/23 16:49	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/24/23 10:36	03/26/23 16:49	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/24/23 10:36	03/26/23 16:49	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/24/23 10:36	03/26/23 16:49	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/24/23 10:36	03/26/23 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/24/23 10:36	03/26/23 16:49	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS05

Lab Sample ID: 890-4310-7

Date Collected: 03/14/23 13:00

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	107		70 - 130	03/24/23 10:36	03/26/23 16:49	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 16:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		03/18/23 09:50	03/19/23 16:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/18/23 09:50	03/19/23 16:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130			03/18/23 09:50	03/19/23 16:58	1
o-Terphenyl	98		70 - 130			03/18/23 09:50	03/19/23 16:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5730		50.2	mg/Kg			03/22/23 22:56	10

Client Sample ID: FS07

Lab Sample ID: 890-4310-8

Date Collected: 03/14/23 13:05

Matrix: Solid

Date Received: 03/14/23 16:17

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		03/24/23 10:36	03/26/23 17:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 17:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 17:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 10:36	03/26/23 17:10	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 10:36	03/26/23 17:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 10:36	03/26/23 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/24/23 10:36	03/26/23 17:10	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/24/23 10:36	03/26/23 17:10	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			03/27/23 10:31	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			03/22/23 17:17	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS07

Lab Sample ID: 890-4310-8

Date Collected: 03/14/23 13:05

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 4'

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		03/18/23 09:50	03/19/23 17:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U **	49.9	mg/Kg		03/18/23 09:50	03/19/23 17:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/18/23 09:50	03/19/23 17:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			03/18/23 09:50	03/19/23 17:19	1
o-Terphenyl	102		70 - 130			03/18/23 09:50	03/19/23 17:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8950		99.6	mg/Kg			03/22/23 23:01	20

Client Sample ID: SW01

Lab Sample ID: 890-4310-9

Date Collected: 03/14/23 13:10

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 0-4'

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		03/24/23 10:36	03/26/23 17:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 17:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 17:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/24/23 10:36	03/26/23 17:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 17:30	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/24/23 10:36	03/26/23 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			03/24/23 10:36	03/26/23 17:30	1
1,4-Difluorobenzene (Surr)	105		70 - 130			03/24/23 10:36	03/26/23 17:30	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 17:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U **	49.9	mg/Kg		03/18/23 09:50	03/19/23 17:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/18/23 09:50	03/19/23 17:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			03/18/23 09:50	03/19/23 17:41	1
o-Terphenyl	101		70 - 130			03/18/23 09:50	03/19/23 17:41	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: SW01

Lab Sample ID: 890-4310-9

Date Collected: 03/14/23 13:10

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 0-4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.0		4.95	mg/Kg			03/22/23 23:06	1

Client Sample ID: SW02

Lab Sample ID: 890-4310-10

Date Collected: 03/14/23 13:15

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 0-4'

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		03/24/23 10:36	03/26/23 17:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 17:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 17:51	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/24/23 10:36	03/26/23 17:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 17:51	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/24/23 10:36	03/26/23 17:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			03/24/23 10:36	03/26/23 17:51	1
1,4-Difluorobenzene (Surr)	107		70 - 130			03/24/23 10:36	03/26/23 17:51	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 18:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		03/18/23 09:50	03/19/23 18:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/18/23 09:50	03/19/23 18:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			03/18/23 09:50	03/19/23 18:02	1
o-Terphenyl	109		70 - 130			03/18/23 09:50	03/19/23 18:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.0		4.97	mg/Kg			03/22/23 23:11	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: SW03

Lab Sample ID: 890-4310-11

Date Collected: 03/14/23 13:20

Matrix: Solid

Date Received: 03/14/23 16:17

Sample Depth: 0-4'

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		03/24/23 10:36	03/26/23 19:41	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/24/23 10:36	03/26/23 19:41	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/24/23 10:36	03/26/23 19:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/24/23 10:36	03/26/23 19:41	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/24/23 10:36	03/26/23 19:41	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/24/23 10:36	03/26/23 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/24/23 10:36	03/26/23 19:41	1
1,4-Difluorobenzene (Surr)	105		70 - 130	03/24/23 10:36	03/26/23 19:41	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			03/27/23 10:31	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			03/22/23 17:17	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		03/18/23 09:50	03/19/23 18:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		03/18/23 09:50	03/19/23 18:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/18/23 09:50	03/19/23 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/18/23 09:50	03/19/23 18:23	1
o-Terphenyl	112		70 - 130	03/18/23 09:50	03/19/23 18:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.5		4.99	mg/Kg			03/22/23 23:16	1

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Surrogate Summary

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-4310-1	FS01	89	104
890-4310-1 MS	FS01	97	110
890-4310-1 MSD	FS01	94	109
890-4310-2	FS02	98	108
890-4310-3	FS04	100	99
890-4310-4	FS06	101	106
890-4310-5	FS08	104	106
890-4310-6	FS03	102	108
890-4310-7	FS05	98	107
890-4310-8	FS07	97	104
890-4310-9	SW01	99	105
890-4310-10	SW02	97	107
890-4310-11	SW03	95	105
LCS 880-49396/1-A	Lab Control Sample	90	107
LCSD 880-49396/2-A	Lab Control Sample Dup	100	113
MB 880-49396/5-A	Method Blank	88	101
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4308-A-41-B MS	Matrix Spike	97	101
890-4308-A-41-C MSD	Matrix Spike Duplicate	114	116
890-4310-1	FS01	96	107
890-4310-2	FS02	93	103
890-4310-3	FS04	97	108
890-4310-4	FS06	84	97
890-4310-5	FS08	86	100
890-4310-6	FS03	85	97
890-4310-7	FS05	85	98
890-4310-8	FS07	89	102
890-4310-9	SW01	87	101
890-4310-10	SW02	97	109
890-4310-11	SW03	101	112
LCS 880-48884/2-A	Lab Control Sample	143 S1+	172 S1+
LCSD 880-48884/3-A	Lab Control Sample Dup	170 S1+	196 S1+
MB 880-48884/1-A	Method Blank	119	138 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49396/5-A

Matrix: Solid

Analysis Batch: 49543

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49396

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 14:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 14:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 14:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/24/23 10:36	03/26/23 14:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 10:36	03/26/23 14:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/24/23 10:36	03/26/23 14:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	03/24/23 10:36	03/26/23 14:17	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/24/23 10:36	03/26/23 14:17	1

Lab Sample ID: LCS 880-49396/1-A

Matrix: Solid

Analysis Batch: 49543

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08267		mg/Kg		83	70 - 130
Toluene	0.100	0.08030		mg/Kg		80	70 - 130
Ethylbenzene	0.100	0.07439		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1476		mg/Kg		74	70 - 130
o-Xylene	0.100	0.07457		mg/Kg		75	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-49396/2-A

Matrix: Solid

Analysis Batch: 49543

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09791		mg/Kg		98	70 - 130	17	35
Toluene	0.100	0.09526		mg/Kg		95	70 - 130	17	35
Ethylbenzene	0.100	0.08693		mg/Kg		87	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.1721		mg/Kg		86	70 - 130	15	35
o-Xylene	0.100	0.08661		mg/Kg		87	70 - 130	15	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-4310-1 MS

Matrix: Solid

Analysis Batch: 49543

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 49396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.08419		mg/Kg		84	70 - 130
Toluene	<0.00199	U	0.0998	0.08261		mg/Kg		82	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

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

Lab Sample ID: 890-4310-1 MS

Matrix: Solid

Analysis Batch: 49543

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 49396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.07554		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1495		mg/Kg		75	70 - 130
o-Xylene	<0.00199	U	0.0998	0.07495		mg/Kg		75	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-4310-1 MSD

Matrix: Solid

Analysis Batch: 49543

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 49396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08496		mg/Kg		85	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.08308		mg/Kg		82	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.100	0.07601		mg/Kg		76	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1499		mg/Kg		75	70 - 130	0	35
o-Xylene	<0.00199	U	0.100	0.07484		mg/Kg		75	70 - 130	0	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

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

Lab Sample ID: MB 880-48884/1-A

Matrix: Solid

Analysis Batch: 48908

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48884

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		03/18/23 09:50	03/19/23 08:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/18/23 09:50	03/19/23 08:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/18/23 09:50	03/19/23 08:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	03/18/23 09:50	03/19/23 08:52	1
o-Terphenyl	138	S1+	70 - 130	03/18/23 09:50	03/19/23 08:52	1

Lab Sample ID: LCS 880-48884/2-A

Matrix: Solid

Analysis Batch: 48908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1075		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1126		mg/Kg		113	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

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

Lab Sample ID: LCS 880-48884/2-A

Matrix: Solid

Analysis Batch: 48908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48884

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	143	S1+	70 - 130
o-Terphenyl	172	S1+	70 - 130

Lab Sample ID: LCSD 880-48884/3-A

Matrix: Solid

Analysis Batch: 48908

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48884

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1003		mg/Kg		100	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	1352	*+	mg/Kg		135	70 - 130	18	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	170	S1+	70 - 130
o-Terphenyl	196	S1+	70 - 130

Lab Sample ID: 890-4308-A-41-B MS

Matrix: Solid

Analysis Batch: 48908

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48884

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	897.9		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *+	998	950.3		mg/Kg		93	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 890-4308-A-41-C MSD

Matrix: Solid

Analysis Batch: 48908

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48884

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	<49.9	U	999	1048		mg/Kg		103	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<49.9	U *+	999	1099		mg/Kg		108	70 - 130	15	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	116		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48967/1-A
Matrix: Solid
Analysis Batch: 49323

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			03/22/23 20:50	1

Lab Sample ID: LCS 880-48967/2-A
Matrix: Solid
Analysis Batch: 49323

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.2		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-48967/3-A
Matrix: Solid
Analysis Batch: 49323

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	257.0		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-4310-2 MS
Matrix: Solid
Analysis Batch: 49323

Client Sample ID: FS02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4300	F1	2490	7499	F1	mg/Kg		129	90 - 110

Lab Sample ID: 890-4310-2 MSD
Matrix: Solid
Analysis Batch: 49323

Client Sample ID: FS02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4300	F1	2490	7294	F1	mg/Kg		121	90 - 110	3	20

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

GC VOA

Prep Batch: 49396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4310-1	FS01	Total/NA	Solid	5035	
890-4310-2	FS02	Total/NA	Solid	5035	
890-4310-3	FS04	Total/NA	Solid	5035	
890-4310-4	FS06	Total/NA	Solid	5035	
890-4310-5	FS08	Total/NA	Solid	5035	
890-4310-6	FS03	Total/NA	Solid	5035	
890-4310-7	FS05	Total/NA	Solid	5035	
890-4310-8	FS07	Total/NA	Solid	5035	
890-4310-9	SW01	Total/NA	Solid	5035	
890-4310-10	SW02	Total/NA	Solid	5035	
890-4310-11	SW03	Total/NA	Solid	5035	
MB 880-49396/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49396/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49396/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4310-1 MS	FS01	Total/NA	Solid	5035	
890-4310-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 49543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4310-1	FS01	Total/NA	Solid	8021B	49396
890-4310-2	FS02	Total/NA	Solid	8021B	49396
890-4310-3	FS04	Total/NA	Solid	8021B	49396
890-4310-4	FS06	Total/NA	Solid	8021B	49396
890-4310-5	FS08	Total/NA	Solid	8021B	49396
890-4310-6	FS03	Total/NA	Solid	8021B	49396
890-4310-7	FS05	Total/NA	Solid	8021B	49396
890-4310-8	FS07	Total/NA	Solid	8021B	49396
890-4310-9	SW01	Total/NA	Solid	8021B	49396
890-4310-10	SW02	Total/NA	Solid	8021B	49396
890-4310-11	SW03	Total/NA	Solid	8021B	49396
MB 880-49396/5-A	Method Blank	Total/NA	Solid	8021B	49396
LCS 880-49396/1-A	Lab Control Sample	Total/NA	Solid	8021B	49396
LCSD 880-49396/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49396
890-4310-1 MS	FS01	Total/NA	Solid	8021B	49396
890-4310-1 MSD	FS01	Total/NA	Solid	8021B	49396

Analysis Batch: 49598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4310-1	FS01	Total/NA	Solid	Total BTEX	
890-4310-2	FS02	Total/NA	Solid	Total BTEX	
890-4310-3	FS04	Total/NA	Solid	Total BTEX	
890-4310-4	FS06	Total/NA	Solid	Total BTEX	
890-4310-5	FS08	Total/NA	Solid	Total BTEX	
890-4310-6	FS03	Total/NA	Solid	Total BTEX	
890-4310-7	FS05	Total/NA	Solid	Total BTEX	
890-4310-8	FS07	Total/NA	Solid	Total BTEX	
890-4310-9	SW01	Total/NA	Solid	Total BTEX	
890-4310-10	SW02	Total/NA	Solid	Total BTEX	
890-4310-11	SW03	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

GC Semi VOA

Prep Batch: 48884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4310-1	FS01	Total/NA	Solid	8015NM Prep	
890-4310-2	FS02	Total/NA	Solid	8015NM Prep	
890-4310-3	FS04	Total/NA	Solid	8015NM Prep	
890-4310-4	FS06	Total/NA	Solid	8015NM Prep	
890-4310-5	FS08	Total/NA	Solid	8015NM Prep	
890-4310-6	FS03	Total/NA	Solid	8015NM Prep	
890-4310-7	FS05	Total/NA	Solid	8015NM Prep	
890-4310-8	FS07	Total/NA	Solid	8015NM Prep	
890-4310-9	SW01	Total/NA	Solid	8015NM Prep	
890-4310-10	SW02	Total/NA	Solid	8015NM Prep	
890-4310-11	SW03	Total/NA	Solid	8015NM Prep	
MB 880-48884/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48884/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48884/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4308-A-41-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4308-A-41-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4310-1	FS01	Total/NA	Solid	8015B NM	48884
890-4310-2	FS02	Total/NA	Solid	8015B NM	48884
890-4310-3	FS04	Total/NA	Solid	8015B NM	48884
890-4310-4	FS06	Total/NA	Solid	8015B NM	48884
890-4310-5	FS08	Total/NA	Solid	8015B NM	48884
890-4310-6	FS03	Total/NA	Solid	8015B NM	48884
890-4310-7	FS05	Total/NA	Solid	8015B NM	48884
890-4310-8	FS07	Total/NA	Solid	8015B NM	48884
890-4310-9	SW01	Total/NA	Solid	8015B NM	48884
890-4310-10	SW02	Total/NA	Solid	8015B NM	48884
890-4310-11	SW03	Total/NA	Solid	8015B NM	48884
MB 880-48884/1-A	Method Blank	Total/NA	Solid	8015B NM	48884
LCS 880-48884/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48884
LCSD 880-48884/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48884
890-4308-A-41-B MS	Matrix Spike	Total/NA	Solid	8015B NM	48884
890-4308-A-41-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48884

Analysis Batch: 49255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4310-1	FS01	Total/NA	Solid	8015 NM	
890-4310-2	FS02	Total/NA	Solid	8015 NM	
890-4310-3	FS04	Total/NA	Solid	8015 NM	
890-4310-4	FS06	Total/NA	Solid	8015 NM	
890-4310-5	FS08	Total/NA	Solid	8015 NM	
890-4310-6	FS03	Total/NA	Solid	8015 NM	
890-4310-7	FS05	Total/NA	Solid	8015 NM	
890-4310-8	FS07	Total/NA	Solid	8015 NM	
890-4310-9	SW01	Total/NA	Solid	8015 NM	
890-4310-10	SW02	Total/NA	Solid	8015 NM	
890-4310-11	SW03	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

HPLC/IC

Leach Batch: 48967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4310-1	FS01	Soluble	Solid	DI Leach	
890-4310-2	FS02	Soluble	Solid	DI Leach	
890-4310-3	FS04	Soluble	Solid	DI Leach	
890-4310-4	FS06	Soluble	Solid	DI Leach	
890-4310-5	FS08	Soluble	Solid	DI Leach	
890-4310-6	FS03	Soluble	Solid	DI Leach	
890-4310-7	FS05	Soluble	Solid	DI Leach	
890-4310-8	FS07	Soluble	Solid	DI Leach	
890-4310-9	SW01	Soluble	Solid	DI Leach	
890-4310-10	SW02	Soluble	Solid	DI Leach	
890-4310-11	SW03	Soluble	Solid	DI Leach	
MB 880-48967/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48967/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48967/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4310-2 MS	FS02	Soluble	Solid	DI Leach	
890-4310-2 MSD	FS02	Soluble	Solid	DI Leach	

Analysis Batch: 49323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4310-1	FS01	Soluble	Solid	300.0	48967
890-4310-2	FS02	Soluble	Solid	300.0	48967
890-4310-3	FS04	Soluble	Solid	300.0	48967
890-4310-4	FS06	Soluble	Solid	300.0	48967
890-4310-5	FS08	Soluble	Solid	300.0	48967
890-4310-6	FS03	Soluble	Solid	300.0	48967
890-4310-7	FS05	Soluble	Solid	300.0	48967
890-4310-8	FS07	Soluble	Solid	300.0	48967
890-4310-9	SW01	Soluble	Solid	300.0	48967
890-4310-10	SW02	Soluble	Solid	300.0	48967
890-4310-11	SW03	Soluble	Solid	300.0	48967
MB 880-48967/1-A	Method Blank	Soluble	Solid	300.0	48967
LCS 880-48967/2-A	Lab Control Sample	Soluble	Solid	300.0	48967
LCSD 880-48967/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48967
890-4310-2 MS	FS02	Soluble	Solid	300.0	48967
890-4310-2 MSD	FS02	Soluble	Solid	300.0	48967

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS01

Date Collected: 03/14/23 11:20

Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-1

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			5.02 g	5 mL	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 14:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 14:25	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	49323	03/22/23 22:08	SMC	EET MID

Client Sample ID: FS02

Date Collected: 03/14/23 11:25

Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-2

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			5.03 g	5 mL	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 15:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 14:47	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49323	03/22/23 22:13	SMC	EET MID

Client Sample ID: FS04

Date Collected: 03/14/23 11:30

Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-3

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			5.01 g	5 mL	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 15:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 15:09	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	49323	03/22/23 22:27	SMC	EET MID

Client Sample ID: FS06

Date Collected: 03/14/23 11:35

Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-4

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	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 15:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS06

Lab Sample ID: 890-4310-4

Date Collected: 03/14/23 11:35

Matrix: Solid

Date Received: 03/14/23 16:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 15:31	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49323	03/22/23 22:32	SMC	EET MID

Client Sample ID: FS08

Lab Sample ID: 890-4310-5

Date Collected: 03/14/23 11:40

Matrix: Solid

Date Received: 03/14/23 16:17

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	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 16:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 16:15	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49323	03/22/23 22:47	SMC	EET MID

Client Sample ID: FS03

Lab Sample ID: 890-4310-6

Date Collected: 03/14/23 11:45

Matrix: Solid

Date Received: 03/14/23 16:17

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	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 16:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 16:36	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49323	03/22/23 22:52	SMC	EET MID

Client Sample ID: FS05

Lab Sample ID: 890-4310-7

Date Collected: 03/14/23 13:00

Matrix: Solid

Date Received: 03/14/23 16:17

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	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 16:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 16:58	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: FS05

Date Collected: 03/14/23 13:00

Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49323	03/22/23 22:56	SMC	EET MID

Client Sample ID: FS07

Date Collected: 03/14/23 13:05

Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-8

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	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 17:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 17:19	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	49323	03/22/23 23:01	SMC	EET MID

Client Sample ID: SW01

Date Collected: 03/14/23 13:10

Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-9

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	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 17:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 17:41	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49323	03/22/23 23:06	SMC	EET MID

Client Sample ID: SW02

Date Collected: 03/14/23 13:15

Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-10

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	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 17:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 18:02	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49323	03/22/23 23:11	SMC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Client Sample ID: SW03
Date Collected: 03/14/23 13:20
Date Received: 03/14/23 16:17

Lab Sample ID: 890-4310-11
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	49396	03/24/23 10:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49543	03/26/23 19:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49598	03/27/23 10:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49255	03/22/23 17:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48884	03/18/23 09:50	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48908	03/19/23 18:23	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48967	03/20/23 10:55	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49323	03/22/23 23:16	SMC	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

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	T104704400-22-25	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

- 1
- 2
- 3
- 4
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- 6
- 7
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- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: MCA 145/Maverick

Job ID: 890-4310-1
SDG: 03D2057027

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4310-1	FS01	Solid	03/14/23 11:20	03/14/23 16:17	4'
890-4310-2	FS02	Solid	03/14/23 11:25	03/14/23 16:17	4'
890-4310-3	FS04	Solid	03/14/23 11:30	03/14/23 16:17	4'
890-4310-4	FS06	Solid	03/14/23 11:35	03/14/23 16:17	4'
890-4310-5	FS08	Solid	03/14/23 11:40	03/14/23 16:17	4'
890-4310-6	FS03	Solid	03/14/23 11:45	03/14/23 16:17	4'
890-4310-7	FS05	Solid	03/14/23 13:00	03/14/23 16:17	4'
890-4310-8	FS07	Solid	03/14/23 13:05	03/14/23 16:17	4'
890-4310-9	SW01	Solid	03/14/23 13:10	03/14/23 16:17	0-4'
890-4310-10	SW02	Solid	03/14/23 13:15	03/14/23 16:17	0-4'
890-4310-11	SW03	Solid	03/14/23 13:20	03/14/23 16:17	0-4'



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: _____

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Project Manager:	<u>Josh Adams</u>	Bill to: (if different)	<u>halei jennings</u>
Company Name:	<u>6122 Nat'l Parks Hwy</u>	Company Name:	<u>Ansolum, LLC</u>
Address:	<u>Ansolum, LLC</u>	Address:	<u>6122 Nat'l Parks Hwy</u>
City, State ZIP:	<u>Carlsbad, NM 88220</u>	City, State ZIP:	<u>Carlsbad, NM 88220</u>
Phone:	<u>303-517-8437</u>	Email:	<u>jadams@ansolum.com, hjennings@ansolum.com</u>

Project Name:		<u>MCA 145/Maverick</u>		Turn Around		ANALYSIS REQUEST <u>falconmata@ansolum.com</u>		Preservative Codes	
Project Number:		<u>03D2057027</u>		☒ Routine ☐ Rush		Pres. Code		None: NO DI Water: H ₂ O Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ NaOH: Na H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC	
Project Location:		<u>32505570-108.748544</u>		Due Date:					
Sampler's Name:		<u>Julianna Falconmata</u>		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:		<u>TMM-007</u>			
Cooler Custody Seals:		Yes ☐ No ☒ N/A		Correction Factor:		<u>-0.2</u>			
Sample Custody Seals:		Yes ☐ No ☒ N/A		Temperature Reading:		<u>1.8</u>			
Total Containers:				Corrected Temperature:		<u>1.6</u>			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Sample Comments
F501	S	3/14/23	1126	4'	C	1	TRH BTEX Chlorides	NAPP 229468315
F502			1125	4'				
F504			1130	4'				
F506			1135	4'				
F508			1140	4'				
F503			1145	4'				
F505			1300	4'				
F507			1305	4'				
SU001			1310	24"				
SU002			1315	041"				

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 Ti 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 Ti 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
<u>Julianna Falconmata</u>	<u>Donna Stut</u>	<u>3-14-23 1617</u>			

Revised Date: 08/25/2020 Rev. 2020.2



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: _____

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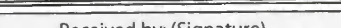
Project Manager:	Josh Adams	Bill to: (if different)	Halie Jennings
Company Name:	5122 Nat'l Parks Hwy	Company Name:	Onsolum, LLC
Address:	Onsolum, LLC	Address:	5122 Nat'l Parks Hwy
City, State ZIP:	Cortez, NM 88220	City, State ZIP:	Cortez, NM 88220
Phone:	303-517-8431	Email:	

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:		

[illegible]

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 \$95.00 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			3-14-23	11:17				
3					4			
5					6			

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4310-1

SDG Number: 03D2057027

Login Number: 4310

List Number: 1

Creator: Stutzman, Amanda

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: 890-4310-1

SDG Number: 03D2057027

Login Number: 4310

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 03/16/23 10:28 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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 3/30/2023 2:13:16 PM

JOB DESCRIPTION

MCA 145 / Maverick
SDG NUMBER 03D2057027

JOB NUMBER

890-4339-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
3/30/2023 2:13:16 PM

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

Client: Ensolum
Project/Site: MCA 145 / Maverick

Laboratory Job ID: 890-4339-1
SDG: 03D2057027

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Definitions/Glossary

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
α	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: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Job ID: 890-4339-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4339-1****Receipt**

The samples were received on 3/17/2023 9:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS19 (890-4339-1), FS20 (890-4339-2), FS21 (890-4339-3), FS22 (890-4339-4), FS23 (890-4339-5) and FS24 (890-4339-6).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS19 (890-4339-1), FS20 (890-4339-2) and FS21 (890-4339-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS22 (890-4339-4), FS23 (890-4339-5), FS24 (890-4339-6) and (880-26222-A-14-E). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-49593 and analytical batch 880-49735 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS24 (890-4339-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-49383/1-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.

Client Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Client Sample ID: FS19

Lab Sample ID: 890-4339-1

Date Collected: 03/15/23 13:45

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/27/23 15:54	03/28/23 10:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:54	03/28/23 10:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:54	03/28/23 10:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/27/23 15:54	03/28/23 10:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:54	03/28/23 10:15	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/27/23 15:54	03/28/23 10:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130	03/27/23 15:54	03/28/23 10:15	1
1,4-Difluorobenzene (Surr)	89		70 - 130	03/27/23 15:54	03/28/23 10:15	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			03/28/23 12:55	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			03/27/23 11:15	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		03/24/23 08:47	03/25/23 04:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 08:47	03/25/23 04:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 08:47	03/25/23 04:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	03/24/23 08:47	03/25/23 04:54	1
o-Terphenyl	92		70 - 130	03/24/23 08:47	03/25/23 04:54	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14800		99.6	mg/Kg			03/29/23 17:17	20

Client Sample ID: FS20

Lab Sample ID: 890-4339-2

Date Collected: 03/15/23 11:35

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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		03/27/23 15:54	03/28/23 10:41	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/27/23 15:54	03/28/23 10:41	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/27/23 15:54	03/28/23 10:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/27/23 15:54	03/28/23 10:41	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/27/23 15:54	03/28/23 10:41	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/27/23 15:54	03/28/23 10:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130	03/27/23 15:54	03/28/23 10:41	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Client Sample ID: FS20

Lab Sample ID: 890-4339-2

Date Collected: 03/15/23 11:35

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130	03/27/23 15:54	03/28/23 10:41	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			03/28/23 12:55	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			03/27/23 11:15	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		03/24/23 08:47	03/25/23 05:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 08:47	03/25/23 05:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 08:47	03/25/23 05:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			03/24/23 08:47	03/25/23 05:16	1
o-Terphenyl	86		70 - 130			03/24/23 08:47	03/25/23 05:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4090		25.3	mg/Kg			03/29/23 17:30	5

Client Sample ID: FS21

Lab Sample ID: 890-4339-3

Date Collected: 03/15/23 11:40

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/27/23 15:54	03/28/23 11:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:54	03/28/23 11:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:54	03/28/23 11:08	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/27/23 15:54	03/28/23 11:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:54	03/28/23 11:08	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/27/23 15:54	03/28/23 11:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130	03/27/23 15:54	03/28/23 11:08	1
1,4-Difluorobenzene (Surr)	87		70 - 130	03/27/23 15:54	03/28/23 11:08	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			03/28/23 12:55	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			03/27/23 11:15	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Client Sample ID: FS21

Lab Sample ID: 890-4339-3

Date Collected: 03/15/23 11:40

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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		03/24/23 08:47	03/25/23 05:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 08:47	03/25/23 05:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 08:47	03/25/23 05:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130			03/24/23 08:47	03/25/23 05:38	1
o-Terphenyl	89		70 - 130			03/24/23 08:47	03/25/23 05:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9840		50.1	mg/Kg			03/29/23 17:35	10

Client Sample ID: FS22

Lab Sample ID: 890-4339-4

Date Collected: 03/16/23 11:05

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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		03/27/23 10:25	03/29/23 09:22	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/27/23 10:25	03/29/23 09:22	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/27/23 10:25	03/29/23 09:22	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/27/23 10:25	03/29/23 09:22	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/27/23 10:25	03/29/23 09:22	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/27/23 10:25	03/29/23 09:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	157	S1+	70 - 130			03/27/23 10:25	03/29/23 09:22	1
1,4-Difluorobenzene (Surr)	80		70 - 130			03/27/23 10:25	03/29/23 09:22	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			03/29/23 12:47	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			03/27/23 11:15	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		03/24/23 08:47	03/25/23 06:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 08:47	03/25/23 06:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 08:47	03/25/23 06:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			03/24/23 08:47	03/25/23 06:00	1
o-Terphenyl	92		70 - 130			03/24/23 08:47	03/25/23 06:00	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Client Sample ID: FS22

Lab Sample ID: 890-4339-4

Date Collected: 03/16/23 11:05

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	473		4.97	mg/Kg			03/29/23 17:49	1

Client Sample ID: FS23

Lab Sample ID: 890-4339-5

Date Collected: 03/16/23 11:10

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/27/23 10:25	03/29/23 09:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 10:25	03/29/23 09:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 10:25	03/29/23 09:49	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/27/23 10:25	03/29/23 09:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 10:25	03/29/23 09:49	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/27/23 10:25	03/29/23 09:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	169	S1+	70 - 130			03/27/23 10:25	03/29/23 09:49	1
1,4-Difluorobenzene (Surr)	90		70 - 130			03/27/23 10:25	03/29/23 09:49	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			03/29/23 12:47	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			03/27/23 11:32	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		03/24/23 09:41	03/26/23 12:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:41	03/26/23 12:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:41	03/26/23 12:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			03/24/23 09:41	03/26/23 12:49	1
o-Terphenyl	111		70 - 130			03/24/23 09:41	03/26/23 12:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	158		4.95	mg/Kg			03/29/23 17:53	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Client Sample ID: FS24

Lab Sample ID: 890-4339-6

Date Collected: 03/16/23 11:15

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/27/23 10:25	03/29/23 11:35	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/27/23 10:25	03/29/23 11:35	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/27/23 10:25	03/29/23 11:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/27/23 10:25	03/29/23 11:35	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/27/23 10:25	03/29/23 11:35	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/27/23 10:25	03/29/23 11:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130	03/27/23 10:25	03/29/23 11:35	1
1,4-Difluorobenzene (Surr)	80		70 - 130	03/27/23 10:25	03/29/23 11:35	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			03/29/23 12:47	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			03/27/23 11:32	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		03/24/23 09:41	03/26/23 13:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:41	03/26/23 13:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:41	03/26/23 13:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	03/24/23 09:41	03/26/23 13:12	1
o-Terphenyl	100		70 - 130	03/24/23 09:41	03/26/23 13:12	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4120		25.0	mg/Kg			03/29/23 17:58	5

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Surrogate Summary

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-26159-A-1-B MS	Matrix Spike	122	89
880-26159-A-1-C MSD	Matrix Spike Duplicate	130	126
880-26222-A-14-C MS	Matrix Spike	158 S1+	121
880-26222-A-14-D MSD	Matrix Spike Duplicate	169 S1+	11 S1-
890-4339-1	FS19	143 S1+	89
890-4339-2	FS20	139 S1+	88
890-4339-3	FS21	149 S1+	87
890-4339-4	FS22	157 S1+	80
890-4339-5	FS23	169 S1+	90
890-4339-6	FS24	160 S1+	80
LCS 880-49229/1-A	Lab Control Sample	127	121
LCS 880-49593/1-A	Lab Control Sample	141 S1+	103
LCSD 880-49229/2-A	Lab Control Sample Dup	120	78
LCSD 880-49593/2-A	Lab Control Sample Dup	141 S1+	111
MB 880-49229/5-A	Method Blank	85	92
MB 880-49341/5-A	Method Blank	75	86
MB 880-49447/5-A	Method Blank	92	81
MB 880-49593/5-A	Method Blank	101	75
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4339-1	FS19	87	92
890-4339-2	FS20	89	86
890-4339-3	FS21	84	89
890-4339-4	FS22	86	92
890-4339-5	FS23	99	111
890-4339-6	FS24	93	100
890-4350-A-5-B MS	Matrix Spike	104	97
890-4376-A-1-C MS	Matrix Spike	94	94
890-4376-A-1-D MSD	Matrix Spike Duplicate	111	103
LCS 880-49368/2-A	Lab Control Sample	85	100
LCS 880-49383/2-A	Lab Control Sample	111	119
LCSD 880-49368/3-A	Lab Control Sample Dup	83	96
LCSD 880-49383/3-A	Lab Control Sample Dup	107	115
MB 880-49368/1-A	Method Blank	101	109
MB 880-49383/1-A	Method Blank	121	139 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49229/5-A

Matrix: Solid

Analysis Batch: 49563

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49229

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/22/23 15:54	03/28/23 01:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/22/23 15:54	03/28/23 01:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/22/23 15:54	03/28/23 01:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/22/23 15:54	03/28/23 01:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/22/23 15:54	03/28/23 01:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/22/23 15:54	03/28/23 01:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	03/22/23 15:54	03/28/23 01:21	1
1,4-Difluorobenzene (Surr)	92		70 - 130	03/22/23 15:54	03/28/23 01:21	1

Lab Sample ID: LCS 880-49229/1-A

Matrix: Solid

Analysis Batch: 49563

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1130		mg/Kg		113	70 - 130
Toluene	0.100	0.09600		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.1072		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2198		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	121		70 - 130

Lab Sample ID: LCSD 880-49229/2-A

Matrix: Solid

Analysis Batch: 49563

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49229

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1005		mg/Kg		100	70 - 130	12	35
Toluene	0.100	0.1011		mg/Kg		101	70 - 130	5	35
Ethylbenzene	0.100	0.1085		mg/Kg		108	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2223		mg/Kg		111	70 - 130	1	35
o-Xylene	0.100	0.1089		mg/Kg		109	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	78		70 - 130

Lab Sample ID: 880-26159-A-1-B MS

Matrix: Solid

Analysis Batch: 49563

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49229

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1104		mg/Kg		110	70 - 130
Toluene	<0.00200	U	0.100	0.09977		mg/Kg		99	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

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

Lab Sample ID: 880-26159-A-1-B MS

Matrix: Solid

Analysis Batch: 49563

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49229

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.1046		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.201	0.2141		mg/Kg		107	70 - 130
o-Xylene	<0.00200	U	0.100	0.1028		mg/Kg		102	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: 880-26159-A-1-C MSD

Matrix: Solid

Analysis Batch: 49563

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49229

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	0.1088		mg/Kg		110	70 - 130	1	35
Toluene	<0.00200	U	0.0990	0.09767		mg/Kg		99	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.0990	0.1048		mg/Kg		106	70 - 130	0	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.2159		mg/Kg		109	70 - 130	1	35
o-Xylene	<0.00200	U	0.0990	0.1032		mg/Kg		104	70 - 130	0	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	130		70 - 130
1,4-Difluorobenzene (Surr)	126		70 - 130

Lab Sample ID: MB 880-49341/5-A

Matrix: Solid

Analysis Batch: 49563

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49341

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/23/23 15:59	03/27/23 11:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/23/23 15:59	03/27/23 11:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/23/23 15:59	03/27/23 11:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/23/23 15:59	03/27/23 11:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/23/23 15:59	03/27/23 11:48	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/23/23 15:59	03/27/23 11:48	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	03/23/23 15:59	03/27/23 11:48	1
1,4-Difluorobenzene (Surr)	86		70 - 130	03/23/23 15:59	03/27/23 11:48	1

Lab Sample ID: MB 880-49447/5-A

Matrix: Solid

Analysis Batch: 49735

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49447

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/24/23 14:10	03/28/23 15:20	1

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

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

Lab Sample ID: MB 880-49447/5-A

Matrix: Solid

Analysis Batch: 49735

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49447

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			03/24/23 14:10	03/28/23 15:20	1
1,4-Difluorobenzene (Surr)	81		70 - 130			03/24/23 14:10	03/28/23 15:20	1

Lab Sample ID: MB 880-49593/5-A

Matrix: Solid

Analysis Batch: 49735

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49593

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/27/23 10:25	03/29/23 05:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 10:25	03/29/23 05:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 10:25	03/29/23 05:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/27/23 10:25	03/29/23 05:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 10:25	03/29/23 05:22	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/27/23 10:25	03/29/23 05:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			03/27/23 10:25	03/29/23 05:22	1
1,4-Difluorobenzene (Surr)	75		70 - 130			03/27/23 10:25	03/29/23 05:22	1

Lab Sample ID: LCS 880-49593/1-A

Matrix: Solid

Analysis Batch: 49735

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49593

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1199		mg/Kg		120	70 - 130
Toluene	0.100	0.1158		mg/Kg		116	70 - 130
Ethylbenzene	0.100	0.1280		mg/Kg		128	70 - 130
m-Xylene & p-Xylene	0.200	0.2605		mg/Kg		130	70 - 130
o-Xylene	0.100	0.1223		mg/Kg		122	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130				
1,4-Difluorobenzene (Surr)	103		70 - 130				

Lab Sample ID: LCSD 880-49593/2-A

Matrix: Solid

Analysis Batch: 49735

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49593

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1228		mg/Kg		123	70 - 130	2	35
Toluene	0.100	0.1169		mg/Kg		117	70 - 130	1	35
Ethylbenzene	0.100	0.1232		mg/Kg		123	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2531		mg/Kg		127	70 - 130	3	35
o-Xylene	0.100	0.1231		mg/Kg		123	70 - 130	1	35

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-26222-A-14-C MS

Matrix: Solid

Analysis Batch: 49735

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49593

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1 F2	0.0998	0.1270		mg/Kg		127	70 - 130
Toluene	<0.00201	U F1 F2	0.0998	0.1107		mg/Kg		111	70 - 130
Ethylbenzene	<0.00201	U F1 F2	0.0998	0.1167		mg/Kg		117	70 - 130
m-Xylene & p-Xylene	<0.00402	U F2	0.200	0.2342		mg/Kg		117	70 - 130
o-Xylene	<0.00201	U F2	0.0998	0.1115		mg/Kg		112	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130
1,4-Difluorobenzene (Surr)	121		70 - 130

Lab Sample ID: 880-26222-A-14-D MSD

Matrix: Solid

Analysis Batch: 49735

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49593

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00201	U F1 F2	0.0990	0.06386	F1 F2	mg/Kg		65	70 - 130	66	35
Toluene	<0.00201	U F1 F2	0.0990	0.06036	F1 F2	mg/Kg		61	70 - 130	59	35
Ethylbenzene	<0.00201	U F1 F2	0.0990	0.06621	F1 F2	mg/Kg		67	70 - 130	55	35
m-Xylene & p-Xylene	<0.00402	U F2	0.198	0.1381	F2	mg/Kg		70	70 - 130	52	35
o-Xylene	<0.00201	U F2	0.0990	0.07063	F2	mg/Kg		71	70 - 130	45	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	169	S1+	70 - 130
1,4-Difluorobenzene (Surr)	11	S1-	70 - 130

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

Lab Sample ID: MB 880-49368/1-A

Matrix: Solid

Analysis Batch: 49358

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49368

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		03/24/23 08:47	03/24/23 20:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 08:47	03/24/23 20:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 08:47	03/24/23 20:44	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	101		70 - 130	03/24/23 08:47	03/24/23 20:44	1		
o-Terphenyl	109		70 - 130	03/24/23 08:47	03/24/23 20:44	1		

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

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

Lab Sample ID: LCS 880-49368/2-A

Matrix: Solid

Analysis Batch: 49358

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49368

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10			1000	852.9		mg/Kg		85		70 - 130	
Diesel Range Organics (Over C10-C28)			1000	963.6		mg/Kg		96		70 - 130	
					</						

Lab Sample ID: LCSD 880-49368/3-A

Matrix: Solid

Analysis Batch: 49358

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49368

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	808.3		mg/Kg		81	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	895.3		mg/Kg		90	70 - 130	7	20
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	83		70 - 130								
o-Terphenyl	96		70 - 130								

Lab Sample ID: 890-4376-A-1-C MS

Matrix: Solid

Analysis Batch: 49358

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49368

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	981.4		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	998	971.8		mg/Kg		97	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	94		70 - 130								
o-Terphenyl	94		70 - 130								

Lab Sample ID: 890-4376-A-1-D MSD

Matrix: Solid

Analysis Batch: 49358

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49368

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1188		mg/Kg		115	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1087		mg/Kg		109	70 - 130	11	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	111		70 - 130								

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

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

Lab Sample ID: 890-4376-A-1-D MSD

Matrix: Solid

Analysis Batch: 49358

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49368

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	103		70 - 130

Lab Sample ID: MB 880-49383/1-A

Matrix: Solid

Analysis Batch: 49516

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49383

	MB	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/24/23 09:41	03/26/23 08:27	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:41	03/26/23 08:27	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:41	03/26/23 08:27	1	
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
1-Chlorooctane	121		70 - 130			03/24/23 09:41	03/26/23 08:27	1	
<i>o</i> -Terphenyl	139	S1+	70 - 130			03/24/23 09:41	03/26/23 08:27	1	

Lab Sample ID: LCS 880-49383/2-A

Matrix: Solid

Analysis Batch: 49516

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49383

	Spike	LCS	LCS					%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	971.5		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	868.0		mg/Kg		87	70 - 130		
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	111		70 - 130						
<i>o</i> -Terphenyl	119		70 - 130						

Lab Sample ID: LCSD 880-49383/3-A

Matrix: Solid

Analysis Batch: 49516

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49383

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	893.3		mg/Kg		89	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	752.9		mg/Kg		75	70 - 130	14	20
	LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	107		70 - 130						
<i>o</i> -Terphenyl	115		70 - 130						

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

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

Lab Sample ID: 890-4350-A-5-B MS

Matrix: Solid

Analysis Batch: 49516

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49383

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	928.2		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1002		mg/Kg		98	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	97		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-49795/1-A

Matrix: Solid

Analysis Batch: 49900

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			03/29/23 16:00	1

Lab Sample ID: LCS 880-49795/2-A

Matrix: Solid

Analysis Batch: 49900

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.1		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-49795/3-A

Matrix: Solid

Analysis Batch: 49900

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	254.2		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 890-4339-1 MS

Matrix: Solid

Analysis Batch: 49900

Client Sample ID: FS19

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	14800		4980	19950		mg/Kg		103	90 - 110

Lab Sample ID: 890-4339-1 MSD

Matrix: Solid

Analysis Batch: 49900

Client Sample ID: FS19

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	14800		4980	20060		mg/Kg		105	90 - 110	1	20

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

GC VOA

Prep Batch: 49229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-1	FS19	Total/NA	Solid	5035	
890-4339-2	FS20	Total/NA	Solid	5035	
890-4339-3	FS21	Total/NA	Solid	5035	
MB 880-49229/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49229/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49229/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26159-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-26159-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 49341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-49341/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 49447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-49447/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 49563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-1	FS19	Total/NA	Solid	8021B	49229
890-4339-2	FS20	Total/NA	Solid	8021B	49229
890-4339-3	FS21	Total/NA	Solid	8021B	49229
MB 880-49229/5-A	Method Blank	Total/NA	Solid	8021B	49229
MB 880-49341/5-A	Method Blank	Total/NA	Solid	8021B	49341
LCS 880-49229/1-A	Lab Control Sample	Total/NA	Solid	8021B	49229
LCSD 880-49229/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49229
880-26159-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	49229
880-26159-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49229

Prep Batch: 49593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-4	FS22	Total/NA	Solid	5035	
890-4339-5	FS23	Total/NA	Solid	5035	
890-4339-6	FS24	Total/NA	Solid	5035	
MB 880-49593/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49593/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49593/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26222-A-14-C MS	Matrix Spike	Total/NA	Solid	5035	
880-26222-A-14-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-4	FS22	Total/NA	Solid	8021B	49593
890-4339-5	FS23	Total/NA	Solid	8021B	49593
890-4339-6	FS24	Total/NA	Solid	8021B	49593
MB 880-49447/5-A	Method Blank	Total/NA	Solid	8021B	49447
MB 880-49593/5-A	Method Blank	Total/NA	Solid	8021B	49593
LCS 880-49593/1-A	Lab Control Sample	Total/NA	Solid	8021B	49593
LCSD 880-49593/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49593
880-26222-A-14-C MS	Matrix Spike	Total/NA	Solid	8021B	49593
880-26222-A-14-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49593

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

GC VOA

Analysis Batch: 49748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-1	FS19	Total/NA	Solid	Total BTEX	
890-4339-2	FS20	Total/NA	Solid	Total BTEX	
890-4339-3	FS21	Total/NA	Solid	Total BTEX	
890-4339-4	FS22	Total/NA	Solid	Total BTEX	
890-4339-5	FS23	Total/NA	Solid	Total BTEX	
890-4339-6	FS24	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 49358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-1	FS19	Total/NA	Solid	8015B NM	49368
890-4339-2	FS20	Total/NA	Solid	8015B NM	49368
890-4339-3	FS21	Total/NA	Solid	8015B NM	49368
890-4339-4	FS22	Total/NA	Solid	8015B NM	49368
MB 880-49368/1-A	Method Blank	Total/NA	Solid	8015B NM	49368
LCS 880-49368/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49368
LCSD 880-49368/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49368
890-4376-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	49368
890-4376-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49368

Prep Batch: 49368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-1	FS19	Total/NA	Solid	8015NM Prep	
890-4339-2	FS20	Total/NA	Solid	8015NM Prep	
890-4339-3	FS21	Total/NA	Solid	8015NM Prep	
890-4339-4	FS22	Total/NA	Solid	8015NM Prep	
MB 880-49368/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49368/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49368/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4376-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4376-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 49383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-5	FS23	Total/NA	Solid	8015NM Prep	
890-4339-6	FS24	Total/NA	Solid	8015NM Prep	
MB 880-49383/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49383/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49383/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4350-A-5-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-5	FS23	Total/NA	Solid	8015B NM	49383
890-4339-6	FS24	Total/NA	Solid	8015B NM	49383
MB 880-49383/1-A	Method Blank	Total/NA	Solid	8015B NM	49383
LCS 880-49383/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49383
LCSD 880-49383/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49383
890-4350-A-5-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49383

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

GC Semi VOA

Analysis Batch: 49617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-1	FS19	Total/NA	Solid	8015 NM	
890-4339-2	FS20	Total/NA	Solid	8015 NM	
890-4339-3	FS21	Total/NA	Solid	8015 NM	
890-4339-4	FS22	Total/NA	Solid	8015 NM	
890-4339-5	FS23	Total/NA	Solid	8015 NM	
890-4339-6	FS24	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 49795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-1	FS19	Soluble	Solid	DI Leach	
890-4339-2	FS20	Soluble	Solid	DI Leach	
890-4339-3	FS21	Soluble	Solid	DI Leach	
890-4339-4	FS22	Soluble	Solid	DI Leach	
890-4339-5	FS23	Soluble	Solid	DI Leach	
890-4339-6	FS24	Soluble	Solid	DI Leach	
MB 880-49795/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49795/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49795/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4339-1 MS	FS19	Soluble	Solid	DI Leach	
890-4339-1 MSD	FS19	Soluble	Solid	DI Leach	

Analysis Batch: 49900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4339-1	FS19	Soluble	Solid	300.0	49795
890-4339-2	FS20	Soluble	Solid	300.0	49795
890-4339-3	FS21	Soluble	Solid	300.0	49795
890-4339-4	FS22	Soluble	Solid	300.0	49795
890-4339-5	FS23	Soluble	Solid	300.0	49795
890-4339-6	FS24	Soluble	Solid	300.0	49795
MB 880-49795/1-A	Method Blank	Soluble	Solid	300.0	49795
LCS 880-49795/2-A	Lab Control Sample	Soluble	Solid	300.0	49795
LCSD 880-49795/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49795
890-4339-1 MS	FS19	Soluble	Solid	300.0	49795
890-4339-1 MSD	FS19	Soluble	Solid	300.0	49795

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Client Sample ID: FS19

Date Collected: 03/15/23 13:45

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4339-1

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			5.01 g	5 mL	49229	03/27/23 15:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49563	03/28/23 10:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49748	03/28/23 12:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			49617	03/27/23 11:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49368	03/24/23 08:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49358	03/25/23 04:54	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	49900	03/29/23 17:17	SMC	EET MID

Client Sample ID: FS20

Date Collected: 03/15/23 11:35

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4339-2

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			4.97 g	5 mL	49229	03/27/23 15:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49563	03/28/23 10:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49748	03/28/23 12:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			49617	03/27/23 11:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49368	03/24/23 08:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49358	03/25/23 05:16	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	49900	03/29/23 17:30	SMC	EET MID

Client Sample ID: FS21

Date Collected: 03/15/23 11:40

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4339-3

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			4.99 g	5 mL	49229	03/27/23 15:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49563	03/28/23 11:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49748	03/28/23 12:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			49617	03/27/23 11:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49368	03/24/23 08:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49358	03/25/23 05:38	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49900	03/29/23 17:35	SMC	EET MID

Client Sample ID: FS22

Date Collected: 03/16/23 11:05

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4339-4

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	49593	03/27/23 10:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/29/23 09:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49748	03/29/23 12:47	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Client Sample ID: FS22

Lab Sample ID: 890-4339-4

Date Collected: 03/16/23 11:05

Matrix: Solid

Date Received: 03/17/23 09:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			49617	03/27/23 11:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49368	03/24/23 08:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49358	03/25/23 06:00	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49900	03/29/23 17:49	SMC	EET MID

Client Sample ID: FS23

Lab Sample ID: 890-4339-5

Date Collected: 03/16/23 11:10

Matrix: Solid

Date Received: 03/17/23 09:07

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	49593	03/27/23 10:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/29/23 09:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49748	03/29/23 12:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			49617	03/27/23 11:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49383	03/24/23 09:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49516	03/26/23 12:49	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49900	03/29/23 17:53	SMC	EET MID

Client Sample ID: FS24

Lab Sample ID: 890-4339-6

Date Collected: 03/16/23 11:15

Matrix: Solid

Date Received: 03/17/23 09:07

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	49593	03/27/23 10:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/29/23 11:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49748	03/29/23 12:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			49617	03/27/23 11:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49383	03/24/23 09:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49516	03/26/23 13:12	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	49900	03/29/23 17:58	SMC	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

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	T104704400-22-25	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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: MCA 145 / Maverick

Job ID: 890-4339-1
SDG: 03D2057027

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4339-1	FS19	Solid	03/15/23 13:45	03/17/23 09:07	4
890-4339-2	FS20	Solid	03/15/23 11:35	03/17/23 09:07	4
890-4339-3	FS21	Solid	03/15/23 11:40	03/17/23 09:07	4
890-4339-4	FS22	Solid	03/16/23 11:05	03/17/23 09:07	4
890-4339-5	FS23	Solid	03/16/23 11:10	03/17/23 09:07	4
890-4339-6	FS24	Solid	03/16/23 11:15	03/17/23 09:07	4

- 1
- 2
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- 13
- 14



Environment Testing
Xenco

Chain of Custody

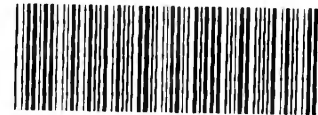
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page _____ of _____

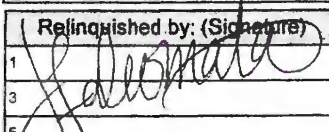
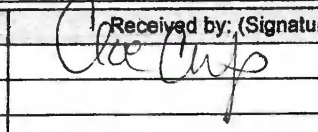
Project Manager:	Josh Adams	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	3122 Nat'l Parks Highway	Address:	3122 Nat'l Parks Highway
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-517-8437	Email:	jadams@ensolum.com, kjennings@ensolum.com

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐	
State of Project: NM	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADaPT ☐ Other: _____	

Project Name: 10-A145 / Maxwell		Turn Around		Pres. Code	ANALYSIS REQUEST												Preservative Codes				
Project Number: 03D20570247		☒ Routine ☐ Rush			 890-4339 Chain of Custody												None: NO DI Water: H ₂ O				
Project Location: 32.805570, 103.740544		Due Date: _____															Cool: Cool MeOH: Me				
Sampler's Name: Julianna Falcomata		TAT starts the day received by the lab, if received by 4:30pm															HCL: HC HNO ₃ : HN				
PO #:																	H ₂ SO ₄ : H ₂ NaOH: Na				
SAMPLE RECEIPT		Temp Blank: ☒ Yes ☐ No		Wet Ice: ☒ Yes ☐ No		Thermometer ID: 7111007		Correction Factor: -0.2		Temperature Reading: 2.2		Corrected Temperature: 1.8		Sample Comments							
Samples Received Intact: ☒ Yes ☐ No		Cooler Custody Seals: Yes ☐ No ☒ N/A		Sample Custody Seals: Yes ☐ No ☒ N/A		Total Containers: _____															
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	BTEX	TPH	CHLORIDES												
FS19	S	3/5/23	1245	4'	0	1															
FS20	S	3/5/23	1135	4'																	
FS21	S	3/5/23	1140	4'																	
FS22	S	3/6/23	1105	4'																	
FS23	S	3/6/23	1110	4'																	
FS24	S	3/6/23	1115	4'																	

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 Ti 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 Ti 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
		3-17-23 907 ²			

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4339-1

SDG Number: 03D2057027

Login Number: 4339

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: 890-4339-1

SDG Number: 03D2057027

Login Number: 4339

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 03/20/23 08:25 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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 3/30/2023 2:14:34 PM

JOB DESCRIPTION

MCA 145-Maverick
SDG NUMBER 03D2057027

JOB NUMBER

890-4341-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
3/30/2023 2:14:34 PM

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

Client: Ensolum
Project/Site: MCA 145-Maverick

Laboratory Job ID: 890-4341-1
SDG: 03D2057027

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Definitions/Glossary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Job ID: 890-4341-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4341-1****Receipt**

The samples were received on 3/17/2023 9:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS09 (890-4341-1), FS10 (890-4341-2), FS11 (890-4341-3), FS12 (890-4341-4), FS13 (890-4341-5), FS14 (890-4341-6), FS15 (890-4341-7), FS16 (890-4341-8), FS17 (890-4341-9) and FS18 (890-4341-10).

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: (880-26043-A-3-F MS) and (880-26043-A-3-G 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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-49796 and analytical batch 880-49897 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. FS12 (890-4341-4), FS13 (890-4341-5), FS14 (890-4341-6), FS15 (890-4341-7), FS16 (890-4341-8), FS17 (890-4341-9), FS18 (890-4341-10), (890-4341-A-4-E MS) and (890-4341-A-4-F MSD)

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: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS09

Lab Sample ID: 890-4341-1

Date Collected: 03/15/23 11:00

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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		03/24/23 13:06	03/27/23 15:40	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/24/23 13:06	03/27/23 15:40	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/24/23 13:06	03/27/23 15:40	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/24/23 13:06	03/27/23 15:40	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/24/23 13:06	03/27/23 15:40	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/24/23 13:06	03/27/23 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	03/24/23 13:06	03/27/23 15:40	1
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130	03/24/23 13:06	03/27/23 15:40	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			03/27/23 16:31	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 12:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 12:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 12:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/24/23 09:44	03/27/23 12:54	1
o-Terphenyl	95		70 - 130	03/24/23 09:44	03/27/23 12:54	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2390		25.2	mg/Kg			03/29/23 18:07	5

Client Sample ID: FS10

Lab Sample ID: 890-4341-2

Date Collected: 03/15/23 11:05

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/24/23 13:06	03/27/23 16:00	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 16:00	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 16:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 13:06	03/27/23 16:00	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 16:00	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 13:06	03/27/23 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	03/24/23 13:06	03/27/23 16:00	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS10

Lab Sample ID: 890-4341-2

Date Collected: 03/15/23 11:05

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	03/24/23 13:06	03/27/23 16:00	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			03/27/23 16:31	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 13:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 13:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 13:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			03/24/23 09:44	03/27/23 13:16	1
o-Terphenyl	97		70 - 130			03/24/23 09:44	03/27/23 13:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1370		25.1	mg/Kg			03/29/23 18:12	5

Client Sample ID: FS11

Lab Sample ID: 890-4341-3

Date Collected: 03/15/23 11:10

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/24/23 13:06	03/27/23 16:21	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 16:21	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 16:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 13:06	03/27/23 16:21	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 16:21	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 13:06	03/27/23 16:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	03/24/23 13:06	03/27/23 16:21	1
1,4-Difluorobenzene (Surr)	73		70 - 130	03/24/23 13:06	03/27/23 16:21	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			03/28/23 10:23	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			03/28/23 10:42	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS11

Lab Sample ID: 890-4341-3

Date Collected: 03/15/23 11:10

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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		03/24/23 09:44	03/27/23 13:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 13:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 13:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			03/24/23 09:44	03/27/23 13:37	1
o-Terphenyl	98		70 - 130			03/24/23 09:44	03/27/23 13:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10200		99.4	mg/Kg			03/29/23 18:16	20

Client Sample ID: FS12

Lab Sample ID: 890-4341-4

Date Collected: 03/15/23 13:30

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/24/23 13:06	03/27/23 16:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 16:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 16:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/24/23 13:06	03/27/23 16:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 16:41	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/24/23 13:06	03/27/23 16:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			03/24/23 13:06	03/27/23 16:41	1
1,4-Difluorobenzene (Surr)	95		70 - 130			03/24/23 13:06	03/27/23 16:41	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			03/28/23 10:23	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 13:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 13:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 13:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			03/24/23 09:44	03/27/23 13:58	1
o-Terphenyl	98		70 - 130			03/24/23 09:44	03/27/23 13:58	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS12

Lab Sample ID: 890-4341-4

Date Collected: 03/15/23 13:30

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5190	F1	49.7	mg/Kg			03/29/23 13:02	10

Client Sample ID: FS13

Lab Sample ID: 890-4341-5

Date Collected: 03/15/23 11:15

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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		03/24/23 13:06	03/27/23 17:02	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:06	03/27/23 17:02	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:06	03/27/23 17:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/24/23 13:06	03/27/23 17:02	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:06	03/27/23 17:02	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/24/23 13:06	03/27/23 17:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			03/24/23 13:06	03/27/23 17:02	1
1,4-Difluorobenzene (Surr)	84		70 - 130			03/24/23 13:06	03/27/23 17:02	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			03/28/23 10:23	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 14:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 14:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 14:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			03/24/23 09:44	03/27/23 14:20	1
o-Terphenyl	112		70 - 130			03/24/23 09:44	03/27/23 14:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9720		49.9	mg/Kg			03/29/23 13:17	10

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS14

Lab Sample ID: 890-4341-6

Date Collected: 03/15/23 11:20

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/24/23 13:06	03/27/23 17:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 17:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 17:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/24/23 13:06	03/27/23 17:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 17:22	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/24/23 13:06	03/27/23 17:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	03/24/23 13:06	03/27/23 17:22	1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/24/23 13:06	03/27/23 17:22	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			03/28/23 10:23	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 14:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 14:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	03/24/23 09:44	03/27/23 14:41	1
o-Terphenyl	100		70 - 130	03/24/23 09:44	03/27/23 14:41	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	466		5.05	mg/Kg			03/29/23 13:21	1

Client Sample ID: FS15

Lab Sample ID: 890-4341-7

Date Collected: 03/15/23 11:25

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/24/23 13:06	03/27/23 17:43	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 17:43	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 17:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 13:06	03/27/23 17:43	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 17:43	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 13:06	03/27/23 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/24/23 13:06	03/27/23 17:43	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS15

Lab Sample ID: 890-4341-7

Date Collected: 03/15/23 11:25

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	72		70 - 130	03/24/23 13:06	03/27/23 17:43	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			03/28/23 10:23	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 15:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 15:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 15:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			03/24/23 09:44	03/27/23 15:03	1
o-Terphenyl	117		70 - 130			03/24/23 09:44	03/27/23 15:03	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11500		49.5	mg/Kg			03/29/23 13:26	10

Client Sample ID: FS16

Lab Sample ID: 890-4341-8

Date Collected: 03/15/23 13:35

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/24/23 13:06	03/27/23 18:03	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 18:03	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 18:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 13:06	03/27/23 18:03	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:06	03/27/23 18:03	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 13:06	03/27/23 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/24/23 13:06	03/27/23 18:03	1
1,4-Difluorobenzene (Surr)	91		70 - 130	03/24/23 13:06	03/27/23 18:03	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			03/28/23 10:23	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			03/28/23 10:42	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS16

Lab Sample ID: 890-4341-8

Date Collected: 03/15/23 13:35

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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		03/24/23 09:44	03/27/23 15:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 15:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 15:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			03/24/23 09:44	03/27/23 15:24	1
o-Terphenyl	112		70 - 130			03/24/23 09:44	03/27/23 15:24	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3990		25.2	mg/Kg			03/29/23 13:31	5

Client Sample ID: FS17

Lab Sample ID: 890-4341-9

Date Collected: 03/15/23 11:30

Matrix: Solid

Date Received: 03/17/23 09:07

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		03/24/23 13:06	03/27/23 18:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 18:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 18:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/24/23 13:06	03/27/23 18:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 18:24	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/24/23 13:06	03/27/23 18:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			03/24/23 13:06	03/27/23 18:24	1
1,4-Difluorobenzene (Surr)	104		70 - 130			03/24/23 13:06	03/27/23 18:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/28/23 10:23	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 16:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 16:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 16:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			03/24/23 09:44	03/27/23 16:07	1
o-Terphenyl	109		70 - 130			03/24/23 09:44	03/27/23 16:07	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS17

Lab Sample ID: 890-4341-9

Date Collected: 03/15/23 11:30

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13800		99.2	mg/Kg			03/29/23 13:46	20

Client Sample ID: FS18

Lab Sample ID: 890-4341-10

Date Collected: 03/15/23 13:40

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 4

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		03/24/23 13:06	03/27/23 18:44	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:06	03/27/23 18:44	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:06	03/27/23 18:44	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/24/23 13:06	03/27/23 18:44	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:06	03/27/23 18:44	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/24/23 13:06	03/27/23 18:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			03/24/23 13:06	03/27/23 18:44	1
1,4-Difluorobenzene (Surr)	72		70 - 130			03/24/23 13:06	03/27/23 18:44	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			03/28/23 10:23	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 16:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 16:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			03/24/23 09:44	03/27/23 16:29	1
o-Terphenyl	114		70 - 130			03/24/23 09:44	03/27/23 16:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	703		4.98	mg/Kg			03/29/23 13:50	1

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Surrogate Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB1	DFBZ1						
		(70-130)	(70-130)						
880-26318-A-1-A MS	Matrix Spike	122	103						
880-26318-A-1-B MSD	Matrix Spike Duplicate	128	95						
890-4341-1	FS09	89	67 S1-						
890-4341-2	FS10	92	105						
890-4341-3	FS11	86	73						
890-4341-4	FS12	90	95						
890-4341-5	FS13	90	84						
890-4341-6	FS14	92	95						
890-4341-7	FS15	94	72						
890-4341-8	FS16	95	91						
890-4341-9	FS17	104	104						
890-4341-10	FS18	105	72						
LCS 880-49422/1-A	Lab Control Sample	109	92						
LCSD 880-49422/2-A	Lab Control Sample Dup	115	110						
MB 880-49422/5-A	Method Blank	85	93						
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)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(70-130)				
880-26043-A-3-F MS	Matrix Spike	136 S1+	116				
880-26043-A-3-G MSD	Matrix Spike Duplicate	133 S1+	113				
890-4341-1	FS09	100	95				
890-4341-2	FS10	103	97				
890-4341-3	FS11	103	98				
890-4341-4	FS12	105	98				
890-4341-5	FS13	115	112				
890-4341-6	FS14	107	100				
890-4341-7	FS15	116	117				
890-4341-8	FS16	113	112				
890-4341-9	FS17	112	109				
890-4341-10	FS18	115	114				
LCS 880-49384/2-A	Lab Control Sample	117	107				
LCSD 880-49384/3-A	Lab Control Sample Dup	118	107				
MB 880-49384/1-A	Method Blank	106	106				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49422/5-A

Matrix: Solid

Analysis Batch: 49564

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49422

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 10:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 10:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 10:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/24/23 13:06	03/27/23 10:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:06	03/27/23 10:50	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/24/23 13:06	03/27/23 10:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	03/24/23 13:06	03/27/23 10:50	1
1,4-Difluorobenzene (Surr)	93		70 - 130	03/24/23 13:06	03/27/23 10:50	1

Lab Sample ID: LCS 880-49422/1-A

Matrix: Solid

Analysis Batch: 49564

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08906		mg/Kg		89	70 - 130
Toluene	0.100	0.08872		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.09163		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1991		mg/Kg		100	70 - 130
o-Xylene	0.100	0.1022		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: LCSD 880-49422/2-A

Matrix: Solid

Analysis Batch: 49564

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49422

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1035		mg/Kg		103	70 - 130	15	35
Toluene	0.100	0.09657		mg/Kg		97	70 - 130	8	35
Ethylbenzene	0.100	0.1014		mg/Kg		101	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.2214		mg/Kg		111	70 - 130	11	35
o-Xylene	0.100	0.1134		mg/Kg		113	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 880-26318-A-1-A MS

Matrix: Solid

Analysis Batch: 49564

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49422

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.08314		mg/Kg		83	70 - 130
Toluene	<0.00200	U	0.0998	0.07878		mg/Kg		79	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

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

Lab Sample ID: 880-26318-A-1-A MS

Matrix: Solid

Analysis Batch: 49564

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49422

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.08529		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1828		mg/Kg		92	70 - 130
o-Xylene	<0.00200	U	0.0998	0.09257		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-26318-A-1-B MSD

Matrix: Solid

Analysis Batch: 49564

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49422

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.07336		mg/Kg		73	70 - 130	13	35
Toluene	<0.00200	U	0.100	0.08093		mg/Kg		81	70 - 130	3	35
Ethylbenzene	<0.00200	U	0.100	0.09224		mg/Kg		92	70 - 130	8	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1962		mg/Kg		98	70 - 130	7	35
o-Xylene	<0.00200	U	0.100	0.09842		mg/Kg		98	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-49384/1-A

Matrix: Solid

Analysis Batch: 49562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49384

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		03/24/23 09:44	03/27/23 08:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 08:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 08:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	03/24/23 09:44	03/27/23 08:47	1
o-Terphenyl	106		70 - 130	03/24/23 09:44	03/27/23 08:47	1

Lab Sample ID: LCS 880-49384/2-A

Matrix: Solid

Analysis Batch: 49562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1113		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1028		mg/Kg		103	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

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

Lab Sample ID: LCS 880-49384/2-A

Matrix: Solid

Analysis Batch: 49562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49384

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

Lab Sample ID: LCSD 880-49384/3-A

Matrix: Solid

Analysis Batch: 49562

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49384

	Spike	LCSD	LCSD						%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit			
Gasoline Range Organics (GRO)-C6-C10	1000	969.4		mg/Kg		97	70 - 130	14	20			
Diesel Range Organics (Over C10-C28)	1000	996.4		mg/Kg		100	70 - 130	3	20			

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 880-26043-A-3-F MS

Matrix: Solid

Analysis Batch: 49562

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49384

	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	883.4		mg/Kg		86	70 - 130			
Diesel Range Organics (Over C10-C28)	117		998	888.4		mg/Kg		77	70 - 130			

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	136	S1+	70 - 130
o-Terphenyl	116		70 - 130

Lab Sample ID: 880-26043-A-3-G MSD

Matrix: Solid

Analysis Batch: 49562

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49384

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	878.2		mg/Kg		86	70 - 130	1	20	
Diesel Range Organics (Over C10-C28)	117		999	874.9		mg/Kg		76	70 - 130	2	20	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	113		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-49796/1-A

Matrix: Solid

Analysis Batch: 49897

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			03/29/23 12:48	1

Lab Sample ID: LCS 880-49796/2-A

Matrix: Solid

Analysis Batch: 49897

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.5		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-49796/3-A

Matrix: Solid

Analysis Batch: 49897

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	255.4		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-4341-4 MS

Matrix: Solid

Analysis Batch: 49897

Client Sample ID: FS12

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5190	F1	2490	8133	F1	mg/Kg		119	90 - 110

Lab Sample ID: 890-4341-4 MSD

Matrix: Solid

Analysis Batch: 49897

Client Sample ID: FS12

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5190	F1	2490	8145	F1	mg/Kg		119	90 - 110	0	20

Lab Sample ID: MB 880-49795/1-A

Matrix: Solid

Analysis Batch: 49900

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			03/29/23 16:00	1

Lab Sample ID: LCS 880-49795/2-A

Matrix: Solid

Analysis Batch: 49900

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.1		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-49795/3-A

Matrix: Solid

Analysis Batch: 49900

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	254.2		mg/Kg		102	90 - 110	3	20

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-4339-A-1-F MS								Client Sample ID: Matrix Spike			
Matrix: Solid								Prep Type: Soluble			
Analysis Batch: 49900											
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	14800		4980	19950		mg/Kg		103	90 - 110		

Lab Sample ID: 890-4339-A-1-G MSD								Client Sample ID: Matrix Spike Duplicate			
Matrix: Solid								Prep Type: Soluble			
Analysis Batch: 49900											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	14800		4980	20060		mg/Kg		105	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

GC VOA

Prep Batch: 49422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-1	FS09	Total/NA	Solid	5035	
890-4341-2	FS10	Total/NA	Solid	5035	
890-4341-3	FS11	Total/NA	Solid	5035	
890-4341-4	FS12	Total/NA	Solid	5035	
890-4341-5	FS13	Total/NA	Solid	5035	
890-4341-6	FS14	Total/NA	Solid	5035	
890-4341-7	FS15	Total/NA	Solid	5035	
890-4341-8	FS16	Total/NA	Solid	5035	
890-4341-9	FS17	Total/NA	Solid	5035	
890-4341-10	FS18	Total/NA	Solid	5035	
MB 880-49422/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49422/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49422/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26318-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-26318-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-1	FS09	Total/NA	Solid	8021B	49422
890-4341-2	FS10	Total/NA	Solid	8021B	49422
890-4341-3	FS11	Total/NA	Solid	8021B	49422
890-4341-4	FS12	Total/NA	Solid	8021B	49422
890-4341-5	FS13	Total/NA	Solid	8021B	49422
890-4341-6	FS14	Total/NA	Solid	8021B	49422
890-4341-7	FS15	Total/NA	Solid	8021B	49422
890-4341-8	FS16	Total/NA	Solid	8021B	49422
890-4341-9	FS17	Total/NA	Solid	8021B	49422
890-4341-10	FS18	Total/NA	Solid	8021B	49422
MB 880-49422/5-A	Method Blank	Total/NA	Solid	8021B	49422
LCS 880-49422/1-A	Lab Control Sample	Total/NA	Solid	8021B	49422
LCSD 880-49422/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49422
880-26318-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	49422
880-26318-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49422

Analysis Batch: 49664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-1	FS09	Total/NA	Solid	Total BTEX	
890-4341-2	FS10	Total/NA	Solid	Total BTEX	
890-4341-3	FS11	Total/NA	Solid	Total BTEX	
890-4341-4	FS12	Total/NA	Solid	Total BTEX	
890-4341-5	FS13	Total/NA	Solid	Total BTEX	
890-4341-6	FS14	Total/NA	Solid	Total BTEX	
890-4341-7	FS15	Total/NA	Solid	Total BTEX	
890-4341-8	FS16	Total/NA	Solid	Total BTEX	
890-4341-9	FS17	Total/NA	Solid	Total BTEX	
890-4341-10	FS18	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

GC Semi VOA

Prep Batch: 49384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-1	FS09	Total/NA	Solid	8015NM Prep	
890-4341-2	FS10	Total/NA	Solid	8015NM Prep	
890-4341-3	FS11	Total/NA	Solid	8015NM Prep	
890-4341-4	FS12	Total/NA	Solid	8015NM Prep	
890-4341-5	FS13	Total/NA	Solid	8015NM Prep	
890-4341-6	FS14	Total/NA	Solid	8015NM Prep	
890-4341-7	FS15	Total/NA	Solid	8015NM Prep	
890-4341-8	FS16	Total/NA	Solid	8015NM Prep	
890-4341-9	FS17	Total/NA	Solid	8015NM Prep	
890-4341-10	FS18	Total/NA	Solid	8015NM Prep	
MB 880-49384/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49384/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49384/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26043-A-3-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26043-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-1	FS09	Total/NA	Solid	8015B NM	49384
890-4341-2	FS10	Total/NA	Solid	8015B NM	49384
890-4341-3	FS11	Total/NA	Solid	8015B NM	49384
890-4341-4	FS12	Total/NA	Solid	8015B NM	49384
890-4341-5	FS13	Total/NA	Solid	8015B NM	49384
890-4341-6	FS14	Total/NA	Solid	8015B NM	49384
890-4341-7	FS15	Total/NA	Solid	8015B NM	49384
890-4341-8	FS16	Total/NA	Solid	8015B NM	49384
890-4341-9	FS17	Total/NA	Solid	8015B NM	49384
890-4341-10	FS18	Total/NA	Solid	8015B NM	49384
MB 880-49384/1-A	Method Blank	Total/NA	Solid	8015B NM	49384
LCS 880-49384/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49384
LCSD 880-49384/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49384
880-26043-A-3-F MS	Matrix Spike	Total/NA	Solid	8015B NM	49384
880-26043-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49384

Analysis Batch: 49725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-1	FS09	Total/NA	Solid	8015 NM	
890-4341-2	FS10	Total/NA	Solid	8015 NM	
890-4341-3	FS11	Total/NA	Solid	8015 NM	
890-4341-4	FS12	Total/NA	Solid	8015 NM	
890-4341-5	FS13	Total/NA	Solid	8015 NM	
890-4341-6	FS14	Total/NA	Solid	8015 NM	
890-4341-7	FS15	Total/NA	Solid	8015 NM	
890-4341-8	FS16	Total/NA	Solid	8015 NM	
890-4341-9	FS17	Total/NA	Solid	8015 NM	
890-4341-10	FS18	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

HPLC/IC

Leach Batch: 49795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-1	FS09	Soluble	Solid	DI Leach	
890-4341-2	FS10	Soluble	Solid	DI Leach	
890-4341-3	FS11	Soluble	Solid	DI Leach	
MB 880-49795/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49795/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49795/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4339-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4339-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 49796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-4	FS12	Soluble	Solid	DI Leach	
890-4341-5	FS13	Soluble	Solid	DI Leach	
890-4341-6	FS14	Soluble	Solid	DI Leach	
890-4341-7	FS15	Soluble	Solid	DI Leach	
890-4341-8	FS16	Soluble	Solid	DI Leach	
890-4341-9	FS17	Soluble	Solid	DI Leach	
890-4341-10	FS18	Soluble	Solid	DI Leach	
MB 880-49796/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49796/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49796/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4341-4 MS	FS12	Soluble	Solid	DI Leach	
890-4341-4 MSD	FS12	Soluble	Solid	DI Leach	

Analysis Batch: 49897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-4	FS12	Soluble	Solid	300.0	49796
890-4341-5	FS13	Soluble	Solid	300.0	49796
890-4341-6	FS14	Soluble	Solid	300.0	49796
890-4341-7	FS15	Soluble	Solid	300.0	49796
890-4341-8	FS16	Soluble	Solid	300.0	49796
890-4341-9	FS17	Soluble	Solid	300.0	49796
890-4341-10	FS18	Soluble	Solid	300.0	49796
MB 880-49796/1-A	Method Blank	Soluble	Solid	300.0	49796
LCS 880-49796/2-A	Lab Control Sample	Soluble	Solid	300.0	49796
LCSD 880-49796/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49796
890-4341-4 MS	FS12	Soluble	Solid	300.0	49796
890-4341-4 MSD	FS12	Soluble	Solid	300.0	49796

Analysis Batch: 49900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4341-1	FS09	Soluble	Solid	300.0	49795
890-4341-2	FS10	Soluble	Solid	300.0	49795
890-4341-3	FS11	Soluble	Solid	300.0	49795
MB 880-49795/1-A	Method Blank	Soluble	Solid	300.0	49795
LCS 880-49795/2-A	Lab Control Sample	Soluble	Solid	300.0	49795
LCSD 880-49795/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49795
890-4339-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	49795
890-4339-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	49795

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS09

Date Collected: 03/15/23 11:00

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4341-1

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			4.95 g	5 mL	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 15:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/27/23 16:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 12:54	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	49900	03/29/23 18:07	SMC	EET MID

Client Sample ID: FS10

Date Collected: 03/15/23 11:05

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4341-2

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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 16:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/27/23 16:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 13:16	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	49900	03/29/23 18:12	SMC	EET MID

Client Sample ID: FS11

Date Collected: 03/15/23 11:10

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4341-3

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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 16:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/28/23 10:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 13:37	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	49795	03/29/23 09:33	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	49900	03/29/23 18:16	SMC	EET MID

Client Sample ID: FS12

Date Collected: 03/15/23 13:30

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4341-4

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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 16:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/28/23 10:23	AJ	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS12

Lab Sample ID: 890-4341-4

Date Collected: 03/15/23 13:30

Matrix: Solid

Date Received: 03/17/23 09:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 13:58	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49897	03/29/23 13:02	SMC	EET MID

Client Sample ID: FS13

Lab Sample ID: 890-4341-5

Date Collected: 03/15/23 11:15

Matrix: Solid

Date Received: 03/17/23 09:07

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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 17:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/28/23 10:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 14:20	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49897	03/29/23 13:17	SMC	EET MID

Client Sample ID: FS14

Lab Sample ID: 890-4341-6

Date Collected: 03/15/23 11:20

Matrix: Solid

Date Received: 03/17/23 09:07

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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 17:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/28/23 10:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 14:41	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49897	03/29/23 13:21	SMC	EET MID

Client Sample ID: FS15

Lab Sample ID: 890-4341-7

Date Collected: 03/15/23 11:25

Matrix: Solid

Date Received: 03/17/23 09:07

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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 17:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/28/23 10:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 15:03	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Client Sample ID: FS15
Date Collected: 03/15/23 11:25
Date Received: 03/17/23 09:07

Lab Sample ID: 890-4341-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49897	03/29/23 13:26	SMC	EET MID

Client Sample ID: FS16
Date Collected: 03/15/23 13:35
Date Received: 03/17/23 09:07

Lab Sample ID: 890-4341-8
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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 18:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/28/23 10:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 15:24	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	49897	03/29/23 13:31	SMC	EET MID

Client Sample ID: FS17
Date Collected: 03/15/23 11:30
Date Received: 03/17/23 09:07

Lab Sample ID: 890-4341-9
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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 18:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/28/23 10:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 16:07	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	49897	03/29/23 13:46	SMC	EET MID

Client Sample ID: FS18
Date Collected: 03/15/23 13:40
Date Received: 03/17/23 09:07

Lab Sample ID: 890-4341-10
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	49422	03/24/23 13:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49564	03/27/23 18:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49664	03/28/23 10:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49725	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 16:29	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49897	03/29/23 13:50	SMC	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

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	T104704400-22-25	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: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4341-1
SDG: 03D2057027

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4341-1	FS09	Solid	03/15/23 11:00	03/17/23 09:07	4
890-4341-2	FS10	Solid	03/15/23 11:05	03/17/23 09:07	4
890-4341-3	FS11	Solid	03/15/23 11:10	03/17/23 09:07	4
890-4341-4	FS12	Solid	03/15/23 13:30	03/17/23 09:07	4
890-4341-5	FS13	Solid	03/15/23 11:15	03/17/23 09:07	4
890-4341-6	FS14	Solid	03/15/23 11:20	03/17/23 09:07	4
890-4341-7	FS15	Solid	03/15/23 11:25	03/17/23 09:07	4
890-4341-8	FS16	Solid	03/15/23 13:35	03/17/23 09:07	4
890-4341-9	FS17	Solid	03/15/23 11:30	03/17/23 09:07	4
890-4341-10	FS18	Solid	03/15/23 13:40	03/17/23 09:07	4



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) 794-1286
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com

Page 1 of 1

Project Manager:	Josh Adams	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	3122 Nat'l Parks Highway	Address:	3122 Nat'l Parks Highway
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-517-8437	Email:	jadams@ensolum.com, kjennings@ensolum.com

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐	
State of Project: NM	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADaPT ☐ Other:	

Project Name: <u>MAILS/MARION</u>		Turn Around		ANALYSIS REQUEST												Preservative Codes				
Project Number: <u>03D2057027</u>		☐ Routine ☐ Rush		 890-4341 Chain of Custody												None: NO DI Water: H ₂ O				
Project Location: <u>32.805570, -103.148544</u>		Due Date:														Cool: Cool MeOH: Me				
Sampler's Name: <u>Julianna Falcomata</u>		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC HNO ₃ : HN				
PO #:																H ₂ SO ₄ : H ₂ NaOH: Na				
SAMPLE RECEIPT		Temp Blank: <u>(Yes) No</u>		Wet Ice: <u>(Yes) No</u>		Parameters BTEX TPH CHLORIDES												H ₃ PO ₄ : HP		
Samples Received Intact: <u>(Yes) No</u>		Thermometer ID: <u>7110007</u>																NaHSO ₄ : NABIS		
Cooler Custody Seals: <u>Yes No N/A</u>		Correction Factor: <u>-0.2</u>																Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals: <u>Yes No N/A</u>		Temperature Reading: <u>2.0</u>																Zn Acetate+NaOH: Zn		
Total Containers:		Corrected Temperature: <u>1.8</u>														NaOH+Ascorbic Acid: SAPC				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont													Sample Comments	
FS09	S	3/5/23	1100	4'	C	1													<u>NAPR22946935</u>	
FS10		3/5/23	1105																	
FS11		3/5/23	1110																	
FS12		3/5/23	1330																	
FS13		3/5/23	1115																	
FS14		3/5/23	1120																	
FS15		3/5/23	1125																	
FS16		3/5/23	1335																	
FS17		3/5/23	1130																	
FS18		3/5/23	1340																	

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 Ti 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 Ti 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
<u>[Signature]</u>	<u>[Signature]</u>	3.17.23 907			

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4341-1

SDG Number: 03D2057027

Login Number: 4341

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: 890-4341-1

SDG Number: 03D2057027

Login Number: 4341

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 03/20/23 08:25 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	



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ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 3/30/2023 2:22:54 PM

JOB DESCRIPTION

MCA 145-Maverick

JOB NUMBER

890-4347-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
3/30/2023 2:22:54 PM

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

Client: Ensolum
Project/Site: MCA 145-Maverick

Laboratory Job ID: 890-4347-1

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Definitions/Glossary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Eurofins Carlsbad

Case Narrative

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Job ID: 890-4347-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4347-1****Receipt**

The samples were received on 3/17/2023 9:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SW07 (890-4347-1), SW08 (890-4347-2), SW09 (890-4347-3), SW10 (890-4347-4), SW11 (890-4347-5), SW12 (890-4347-6) and SW13 (890-4347-7).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-49426 and analytical batch 880-49711 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-4347-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.

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-26043-A-3-F MS) and (880-26043-A-3-G 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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-49797 and 880-49797 and analytical batch 880-49898 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. SW11 (890-4347-5), SW12 (890-4347-6), SW13 (890-4347-7), (890-4347-A-5-E MS) and (890-4347-A-5-F MSD)

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: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW07

Lab Sample ID: 890-4347-1

Date Collected: 03/15/23 13:50

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199	mg/Kg		03/24/23 13:21	03/28/23 13:32	1
Toluene	<0.00199	U F1	0.00199	mg/Kg		03/24/23 13:21	03/28/23 13:32	1
Ethylbenzene	<0.00199	U F1 F2	0.00199	mg/Kg		03/24/23 13:21	03/28/23 13:32	1
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.00398	mg/Kg		03/24/23 13:21	03/28/23 13:32	1
o-Xylene	<0.00199	U F1 F2	0.00199	mg/Kg		03/24/23 13:21	03/28/23 13:32	1
Xylenes, Total	<0.00398	U F1 F2	0.00398	mg/Kg		03/24/23 13:21	03/28/23 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/24/23 13:21	03/28/23 13:32	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/24/23 13:21	03/28/23 13:32	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			03/28/23 17:58	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 16:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 16:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/24/23 09:44	03/27/23 16:50	1
o-Terphenyl	98		70 - 130	03/24/23 09:44	03/27/23 16:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	152		4.96	mg/Kg			03/29/23 14:58	1

Client Sample ID: SW08

Lab Sample ID: 890-4347-2

Date Collected: 03/15/23 13:55

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 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		03/24/23 13:21	03/28/23 13:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 13:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 13:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 13:21	03/28/23 13:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 13:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 13:21	03/28/23 13:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/24/23 13:21	03/28/23 13:53	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW08

Lab Sample ID: 890-4347-2

Date Collected: 03/15/23 13:55

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	03/24/23 13:21	03/28/23 13:53	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			03/28/23 17:58	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 17:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 17:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 17:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			03/24/23 09:44	03/27/23 17:11	1
o-Terphenyl	94		70 - 130			03/24/23 09:44	03/27/23 17:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		5.05	mg/Kg			03/29/23 15:03	1

Client Sample ID: SW09

Lab Sample ID: 890-4347-3

Date Collected: 03/15/23 14:00

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 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		03/24/23 13:21	03/28/23 14:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:21	03/28/23 14:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:21	03/28/23 14:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/24/23 13:21	03/28/23 14:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:21	03/28/23 14:14	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/24/23 13:21	03/28/23 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/24/23 13:21	03/28/23 14:14	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/24/23 13:21	03/28/23 14:14	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			03/28/23 17:58	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			03/28/23 10:42	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW09

Lab Sample ID: 890-4347-3

Date Collected: 03/15/23 14:00

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 4

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		03/24/23 09:44	03/27/23 17:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 17:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 17:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			03/24/23 09:44	03/27/23 17:33	1
o-Terphenyl	94		70 - 130			03/24/23 09:44	03/27/23 17:33	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		5.02	mg/Kg			03/29/23 15:08	1

Client Sample ID: SW10

Lab Sample ID: 890-4347-4

Date Collected: 03/15/23 14:05

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 4

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		03/24/23 13:21	03/28/23 14:34	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:21	03/28/23 14:34	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:21	03/28/23 14:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/24/23 13:21	03/28/23 14:34	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:21	03/28/23 14:34	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/24/23 13:21	03/28/23 14:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			03/24/23 13:21	03/28/23 14:34	1
1,4-Difluorobenzene (Surr)	102		70 - 130			03/24/23 13:21	03/28/23 14:34	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			03/28/23 17:58	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 17:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 17:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			03/24/23 09:44	03/27/23 17:54	1
o-Terphenyl	94		70 - 130			03/24/23 09:44	03/27/23 17:54	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW10

Lab Sample ID: 890-4347-4

Date Collected: 03/15/23 14:05

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	126		5.00	mg/Kg			03/29/23 15:12	1

Client Sample ID: SW11

Lab Sample ID: 890-4347-5

Date Collected: 03/15/23 14:10

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 4

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		03/24/23 13:21	03/28/23 14:54	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:21	03/28/23 14:54	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:21	03/28/23 14:54	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/24/23 13:21	03/28/23 14:54	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/24/23 13:21	03/28/23 14:54	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/24/23 13:21	03/28/23 14:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			03/24/23 13:21	03/28/23 14:54	1
1,4-Difluorobenzene (Surr)	104		70 - 130			03/24/23 13:21	03/28/23 14:54	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			03/28/23 17:58	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 18:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 18:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 18:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			03/24/23 09:44	03/27/23 18:15	1
o-Terphenyl	105		70 - 130			03/24/23 09:44	03/27/23 18:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	128	F1	4.98	mg/Kg			03/29/23 21:01	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW12

Lab Sample ID: 890-4347-6

Date Collected: 03/15/23 14:15

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 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		03/24/23 13:21	03/28/23 15:15	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 15:15	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 15:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 13:21	03/28/23 15:15	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 15:15	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 13:21	03/28/23 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/24/23 13:21	03/28/23 15:15	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/24/23 13:21	03/28/23 15:15	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			03/28/23 17:58	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 18:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 18:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 09:44	03/27/23 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/24/23 09:44	03/27/23 18:36	1
o-Terphenyl	92		70 - 130	03/24/23 09:44	03/27/23 18:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		4.95	mg/Kg			03/29/23 21:16	1

Client Sample ID: SW13

Lab Sample ID: 890-4347-7

Date Collected: 03/15/23 14:20

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 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		03/24/23 13:21	03/28/23 15:36	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 15:36	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 15:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 13:21	03/28/23 15:36	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 13:21	03/28/23 15:36	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 13:21	03/28/23 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/24/23 13:21	03/28/23 15:36	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW13

Lab Sample ID: 890-4347-7

Date Collected: 03/15/23 14:20

Matrix: Solid

Date Received: 03/17/23 09:07

Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	03/24/23 13:21	03/28/23 15:36	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			03/28/23 17:58	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			03/28/23 10:42	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		03/24/23 09:44	03/27/23 18:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 18:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 18:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			03/24/23 09:44	03/27/23 18:57	1
o-Terphenyl	97		70 - 130			03/24/23 09:44	03/27/23 18:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	204		5.02	mg/Kg			03/29/23 21:21	1

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Surrogate Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-4347-1	SW07	96	102
890-4347-1 MS	SW07	90	94
890-4347-1 MSD	SW07	39 S1-	76
890-4347-2	SW08	102	105
890-4347-3	SW09	103	104
890-4347-4	SW10	99	102
890-4347-5	SW11	98	104
890-4347-6	SW12	97	100
890-4347-7	SW13	99	106
LCS 880-49426/1-A	Lab Control Sample	94	109
LCSD 880-49426/2-A	Lab Control Sample Dup	102	111
MB 880-49426/5-A	Method Blank	88	100
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-26043-A-3-F MS	Matrix Spike	136 S1+	116
880-26043-A-3-G MSD	Matrix Spike Duplicate	133 S1+	113
890-4347-1	SW07	101	98
890-4347-2	SW08	105	94
890-4347-3	SW09	100	94
890-4347-4	SW10	99	94
890-4347-5	SW11	108	105
890-4347-6	SW12	100	92
890-4347-7	SW13	105	97
LCS 880-49384/2-A	Lab Control Sample	117	107
LCSD 880-49384/3-A	Lab Control Sample Dup	118	107
MB 880-49384/1-A	Method Blank	106	106
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49426/5-A

Matrix: Solid

Analysis Batch: 49711

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49426

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:21	03/28/23 13:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:21	03/28/23 13:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:21	03/28/23 13:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/24/23 13:21	03/28/23 13:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 13:21	03/28/23 13:04	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/24/23 13:21	03/28/23 13:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	03/24/23 13:21	03/28/23 13:04	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/24/23 13:21	03/28/23 13:04	1

Lab Sample ID: LCS 880-49426/1-A

Matrix: Solid

Analysis Batch: 49711

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49426

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09565		mg/Kg		96	70 - 130
Toluene	0.100	0.09246		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.08278		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1620		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08247		mg/Kg		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-49426/2-A

Matrix: Solid

Analysis Batch: 49711

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49426

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1129		mg/Kg		113	70 - 130	16	35
Toluene	0.100	0.1097		mg/Kg		110	70 - 130	17	35
Ethylbenzene	0.100	0.1016		mg/Kg		102	70 - 130	20	35
m-Xylene & p-Xylene	0.200	0.2003		mg/Kg		100	70 - 130	21	35
o-Xylene	0.100	0.09955		mg/Kg		100	70 - 130	19	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 890-4347-1 MS

Matrix: Solid

Analysis Batch: 49711

Client Sample ID: SW07

Prep Type: Total/NA

Prep Batch: 49426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1 F2	0.0998	0.1633	F1	mg/Kg		164	70 - 130
Toluene	<0.00199	U F1	0.0998	0.1959	F1	mg/Kg		195	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

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

Lab Sample ID: 890-4347-1 MS

Matrix: Solid

Analysis Batch: 49711

Client Sample ID: SW07

Prep Type: Total/NA

Prep Batch: 49426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.1892	F1	mg/Kg		190	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.3694	F1	mg/Kg		185	70 - 130
o-Xylene	<0.00199	U F1 F2	0.0998	0.1819	F1	mg/Kg		182	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-4347-1 MSD

Matrix: Solid

Analysis Batch: 49711

Client Sample ID: SW07

Prep Type: Total/NA

Prep Batch: 49426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.100	0.06618	F1 F2	mg/Kg		66	70 - 130	85	35
Toluene	<0.00199	U F1	0.100	0.1437	F1	mg/Kg		142	70 - 130	31	35
Ethylbenzene	<0.00199	U F1 F2	0.100	0.06972	F1 F2	mg/Kg		69	70 - 130	92	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.201	0.1246	F1 F2	mg/Kg		62	70 - 130	99	35
o-Xylene	<0.00199	U F1 F2	0.100	0.06606	F1 F2	mg/Kg		66	70 - 130	93	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	39	S1-	70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

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

Lab Sample ID: MB 880-49384/1-A

Matrix: Solid

Analysis Batch: 49562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49384

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		03/24/23 09:44	03/27/23 08:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 08:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 09:44	03/27/23 08:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	03/24/23 09:44	03/27/23 08:47	1
o-Terphenyl	106		70 - 130	03/24/23 09:44	03/27/23 08:47	1

Lab Sample ID: LCS 880-49384/2-A

Matrix: Solid

Analysis Batch: 49562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1113		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1028		mg/Kg		103	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

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

Lab Sample ID: LCS 880-49384/2-A
Matrix: Solid
Analysis Batch: 49562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49384

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

Lab Sample ID: LCSD 880-49384/3-A
Matrix: Solid
Analysis Batch: 49562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 49384

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	969.4		mg/Kg		97	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	996.4		mg/Kg		100	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 880-26043-A-3-F MS
Matrix: Solid
Analysis Batch: 49562

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 49384

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	883.4		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)	117		998	888.4		mg/Kg		77	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	136	S1+	70 - 130
o-Terphenyl	116		70 - 130

Lab Sample ID: 880-26043-A-3-G MSD
Matrix: Solid
Analysis Batch: 49562

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 49384

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	<49.9	U	999	878.2		mg/Kg		86	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	117		999	874.9		mg/Kg		76	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	113		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-49796/1-A

Matrix: Solid

Analysis Batch: 49897

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			03/29/23 12:48	1

Lab Sample ID: LCS 880-49796/2-A

Matrix: Solid

Analysis Batch: 49897

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.5		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-49796/3-A

Matrix: Solid

Analysis Batch: 49897

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	255.4		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-4345-A-1-D MS

Matrix: Solid

Analysis Batch: 49897

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	44.0		252	322.3		mg/Kg		110	90 - 110

Lab Sample ID: 890-4345-A-1-E MSD

Matrix: Solid

Analysis Batch: 49897

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	44.0		252	321.9		mg/Kg		110	90 - 110	0	20

Lab Sample ID: MB 880-49797/1-A

Matrix: Solid

Analysis Batch: 49898

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			03/29/23 20:47	1

Lab Sample ID: LCS 880-49797/2-A

Matrix: Solid

Analysis Batch: 49898

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	262.4		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-49797/3-A

Matrix: Solid

Analysis Batch: 49898

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	261.9		mg/Kg		105	90 - 110	0	20

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-4347-5 MS

Client Sample ID: SW11

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 49898

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	128	F1	249	409.9	F1	mg/Kg		113	90 - 110

Lab Sample ID: 890-4347-5 MSD

Client Sample ID: SW11

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 49898

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	128	F1	249	409.3	F1	mg/Kg		113	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

GC VOA

Prep Batch: 49426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-1	SW07	Total/NA	Solid	5035	
890-4347-2	SW08	Total/NA	Solid	5035	
890-4347-3	SW09	Total/NA	Solid	5035	
890-4347-4	SW10	Total/NA	Solid	5035	
890-4347-5	SW11	Total/NA	Solid	5035	
890-4347-6	SW12	Total/NA	Solid	5035	
890-4347-7	SW13	Total/NA	Solid	5035	
MB 880-49426/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49426/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49426/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4347-1 MS	SW07	Total/NA	Solid	5035	
890-4347-1 MSD	SW07	Total/NA	Solid	5035	

Analysis Batch: 49711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-1	SW07	Total/NA	Solid	8021B	49426
890-4347-2	SW08	Total/NA	Solid	8021B	49426
890-4347-3	SW09	Total/NA	Solid	8021B	49426
890-4347-4	SW10	Total/NA	Solid	8021B	49426
890-4347-5	SW11	Total/NA	Solid	8021B	49426
890-4347-6	SW12	Total/NA	Solid	8021B	49426
890-4347-7	SW13	Total/NA	Solid	8021B	49426
MB 880-49426/5-A	Method Blank	Total/NA	Solid	8021B	49426
LCS 880-49426/1-A	Lab Control Sample	Total/NA	Solid	8021B	49426
LCSD 880-49426/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49426
890-4347-1 MS	SW07	Total/NA	Solid	8021B	49426
890-4347-1 MSD	SW07	Total/NA	Solid	8021B	49426

Analysis Batch: 49775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-1	SW07	Total/NA	Solid	Total BTEX	
890-4347-2	SW08	Total/NA	Solid	Total BTEX	
890-4347-3	SW09	Total/NA	Solid	Total BTEX	
890-4347-4	SW10	Total/NA	Solid	Total BTEX	
890-4347-5	SW11	Total/NA	Solid	Total BTEX	
890-4347-6	SW12	Total/NA	Solid	Total BTEX	
890-4347-7	SW13	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 49384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-1	SW07	Total/NA	Solid	8015NM Prep	
890-4347-2	SW08	Total/NA	Solid	8015NM Prep	
890-4347-3	SW09	Total/NA	Solid	8015NM Prep	
890-4347-4	SW10	Total/NA	Solid	8015NM Prep	
890-4347-5	SW11	Total/NA	Solid	8015NM Prep	
890-4347-6	SW12	Total/NA	Solid	8015NM Prep	
890-4347-7	SW13	Total/NA	Solid	8015NM Prep	
MB 880-49384/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49384/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

GC Semi VOA (Continued)

Prep Batch: 49384 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-49384/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26043-A-3-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26043-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-1	SW07	Total/NA	Solid	8015B NM	49384
890-4347-2	SW08	Total/NA	Solid	8015B NM	49384
890-4347-3	SW09	Total/NA	Solid	8015B NM	49384
890-4347-4	SW10	Total/NA	Solid	8015B NM	49384
890-4347-5	SW11	Total/NA	Solid	8015B NM	49384
890-4347-6	SW12	Total/NA	Solid	8015B NM	49384
890-4347-7	SW13	Total/NA	Solid	8015B NM	49384
MB 880-49384/1-A	Method Blank	Total/NA	Solid	8015B NM	49384
LCS 880-49384/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49384
LCSD 880-49384/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49384
880-26043-A-3-F MS	Matrix Spike	Total/NA	Solid	8015B NM	49384
880-26043-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49384

Analysis Batch: 49726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-1	SW07	Total/NA	Solid	8015 NM	
890-4347-2	SW08	Total/NA	Solid	8015 NM	
890-4347-3	SW09	Total/NA	Solid	8015 NM	
890-4347-4	SW10	Total/NA	Solid	8015 NM	
890-4347-5	SW11	Total/NA	Solid	8015 NM	
890-4347-6	SW12	Total/NA	Solid	8015 NM	
890-4347-7	SW13	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 49796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-1	SW07	Soluble	Solid	DI Leach	
890-4347-2	SW08	Soluble	Solid	DI Leach	
890-4347-3	SW09	Soluble	Solid	DI Leach	
890-4347-4	SW10	Soluble	Solid	DI Leach	
MB 880-49796/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49796/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49796/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4345-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4345-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 49797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-5	SW11	Soluble	Solid	DI Leach	
890-4347-6	SW12	Soluble	Solid	DI Leach	
890-4347-7	SW13	Soluble	Solid	DI Leach	
MB 880-49797/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49797/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49797/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

HPLC/IC (Continued)

Leach Batch: 49797 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-5 MS	SW11	Soluble	Solid	DI Leach	
890-4347-5 MSD	SW11	Soluble	Solid	DI Leach	

Analysis Batch: 49897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-1	SW07	Soluble	Solid	300.0	49796
890-4347-2	SW08	Soluble	Solid	300.0	49796
890-4347-3	SW09	Soluble	Solid	300.0	49796
890-4347-4	SW10	Soluble	Solid	300.0	49796
MB 880-49796/1-A	Method Blank	Soluble	Solid	300.0	49796
LCS 880-49796/2-A	Lab Control Sample	Soluble	Solid	300.0	49796
LCSD 880-49796/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49796
890-4345-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	49796
890-4345-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	49796

Analysis Batch: 49898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4347-5	SW11	Soluble	Solid	300.0	49797
890-4347-6	SW12	Soluble	Solid	300.0	49797
890-4347-7	SW13	Soluble	Solid	300.0	49797
MB 880-49797/1-A	Method Blank	Soluble	Solid	300.0	49797
LCS 880-49797/2-A	Lab Control Sample	Soluble	Solid	300.0	49797
LCSD 880-49797/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49797
890-4347-5 MS	SW11	Soluble	Solid	300.0	49797
890-4347-5 MSD	SW11	Soluble	Solid	300.0	49797

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW07

Lab Sample ID: 890-4347-1

Date Collected: 03/15/23 13:50

Matrix: Solid

Date Received: 03/17/23 09:07

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	49426	03/24/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49711	03/28/23 13:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49775	03/28/23 17:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			49726	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 16:50	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49897	03/29/23 14:58	SMC	EET MID

Client Sample ID: SW08

Lab Sample ID: 890-4347-2

Date Collected: 03/15/23 13:55

Matrix: Solid

Date Received: 03/17/23 09:07

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	49426	03/24/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49711	03/28/23 13:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49775	03/28/23 17:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			49726	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 17:11	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49897	03/29/23 15:03	SMC	EET MID

Client Sample ID: SW09

Lab Sample ID: 890-4347-3

Date Collected: 03/15/23 14:00

Matrix: Solid

Date Received: 03/17/23 09:07

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	49426	03/24/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49711	03/28/23 14:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49775	03/28/23 17:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			49726	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 17:33	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49897	03/29/23 15:08	SMC	EET MID

Client Sample ID: SW10

Lab Sample ID: 890-4347-4

Date Collected: 03/15/23 14:05

Matrix: Solid

Date Received: 03/17/23 09:07

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	49426	03/24/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49711	03/28/23 14:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49775	03/28/23 17:58	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW10

Lab Sample ID: 890-4347-4

Date Collected: 03/15/23 14:05

Matrix: Solid

Date Received: 03/17/23 09:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			49726	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 17:54	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	49796	03/29/23 09:36	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49897	03/29/23 15:12	SMC	EET MID

Client Sample ID: SW11

Lab Sample ID: 890-4347-5

Date Collected: 03/15/23 14:10

Matrix: Solid

Date Received: 03/17/23 09:07

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	49426	03/24/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49711	03/28/23 14:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49775	03/28/23 17:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			49726	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 18:15	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49898	03/29/23 21:01	SMC	EET MID

Client Sample ID: SW12

Lab Sample ID: 890-4347-6

Date Collected: 03/15/23 14:15

Matrix: Solid

Date Received: 03/17/23 09:07

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	49426	03/24/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49711	03/28/23 15:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49775	03/28/23 17:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			49726	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 18:36	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49898	03/29/23 21:16	SMC	EET MID

Client Sample ID: SW13

Lab Sample ID: 890-4347-7

Date Collected: 03/15/23 14:20

Matrix: Solid

Date Received: 03/17/23 09:07

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	49426	03/24/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49711	03/28/23 15:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49775	03/28/23 17:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			49726	03/28/23 10:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49384	03/24/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49562	03/27/23 18:57	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Client Sample ID: SW13

Date Collected: 03/15/23 14:20

Date Received: 03/17/23 09:07

Lab Sample ID: 890-4347-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49898	03/29/23 21:21	SMC	EET MID

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

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	T104704400-22-25	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

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Method Summary

Client: Ensolum

Job ID: 890-4347-1

Project/Site: MCA 145-Maverick

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Carlsbad

Sample Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4347-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4347-1	SW07	Solid	03/15/23 13:50	03/17/23 09:07	0 - 4
890-4347-2	SW08	Solid	03/15/23 13:55	03/17/23 09:07	0 - 4
890-4347-3	SW09	Solid	03/15/23 14:00	03/17/23 09:07	0 - 4
890-4347-4	SW10	Solid	03/15/23 14:05	03/17/23 09:07	0 - 4
890-4347-5	SW11	Solid	03/15/23 14:10	03/17/23 09:07	0 - 4
890-4347-6	SW12	Solid	03/15/23 14:15	03/17/23 09:07	0 - 4
890-4347-7	SW13	Solid	03/15/23 14:20	03/17/23 09:07	0 - 4

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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:	Josh Adams	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	3122 National Park Hwy
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-517-8437	Email:	kiennings@ensolum.com, jadams@ensolum.com, ifalcomatta@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:		MCA 145-Maverick		Turn Around				ANALYSIS REQUEST										Preservative Codes		
Project Number:		03D2057027		☒ Routine ☐ Rush		Pres. Code												None: NO DI Water: H ₂ O		
Project Location:		32.805570, -103.748544		Due Date:														Cool: Cool MeOH: Me		
Sampler's Name:		Julianna Falcomatta		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC HNO ₃ : HN		
Cost Center #:																		H ₂ SO ₄ : H ₂ NaOH: Na		
SAMPLE RECEIPT		Temp Blank: ☒ Yes ☐ No		Wet Ice: ☒ Yes ☐ No														H ₃ PO ₄ : HP		
Samples Received Intact:		☒ Yes ☐ No		Thermometer ID:		N11037												NaHSO ₄ : NABIS		
Cooler Custody Seals:		Yes ☐ No ☒ N/A		Correction Factor:		-0.2												Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals:		Yes ☐ No ☒ N/A		Temperature Reading:		2.0												Zn Acetate+NaOH: Zn		
Total Containers:				Corrected Temperature:		1.8												NaOH+Ascorbic Acid: SAPC		
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH	BTEX											Sample Comments
SW07	S	3/15/2023	1350	0-4'	Grab	1	X	X	X											
SW08	S	3/15/2023	1355	0-4'	Grab	1	X	X	X											
SW09	S	3/15/2023	1400	0-4'	Grab	1	X	X	X											NAPP2229469315
SW10	S	3/15/2023	1405	0-4'	Grab	1	X	X	X											
SW11	S	3/15/2023	1410	0-4'	Grab	1	X	X	X											
SW12	S	3/15/2023	1415	0-4'	Grab	1	X	X	X											
SW13	S	3/15/2023	1420	0-4'	Grab	1	X	X	X											

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 Ti 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 TI 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	2	3/17/23 907	3	4	
3	5		6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4347-1

SDG Number:

Login Number: 4347

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: 890-4347-1

SDG Number:

Login Number: 4347

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 03/20/23 08:25 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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 3/30/2023 2:22:54 PM

JOB DESCRIPTION

MCA 145-Maverick

SDG NUMBER 03D2057027

JOB NUMBER

890-4349-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
3/30/2023 2:22:54 PM

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

Client: Ensolum
Project/Site: MCA 145-Maverick

Laboratory Job ID: 890-4349-1
SDG: 03D2057027

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Definitions/Glossary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

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: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Job ID: 890-4349-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4349-1****Receipt**

The samples were received on 3/17/2023 1:56 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 2.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS25 (890-4349-1), FS26 (890-4349-2), FS27 (890-4349-3), FS28 (890-4349-4), FS29 (890-4349-5), SW04 (890-4349-6), SW05 (890-4349-7) and SW06 (890-4349-8).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-26413-A-1-E). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-49797 and 880-49797 and analytical batch 880-49898 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. FS25 (890-4349-1), FS26 (890-4349-2), FS27 (890-4349-3), FS28 (890-4349-4), FS29 (890-4349-5), SW04 (890-4349-6), SW05 (890-4349-7), (890-4347-A-5-D), (890-4347-A-5-E MS) and (890-4347-A-5-F MSD)

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: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: FS25

Lab Sample ID: 890-4349-1

Date Collected: 03/17/23 11:00

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 4

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		03/29/23 08:30	03/29/23 16:11	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/29/23 08:30	03/29/23 16:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/29/23 08:30	03/29/23 16:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/29/23 08:30	03/29/23 16:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/29/23 08:30	03/29/23 16:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/29/23 08:30	03/29/23 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	03/29/23 08:30	03/29/23 16:11	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/29/23 08:30	03/29/23 16:11	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			03/30/23 13:24	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			03/26/23 08:58	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		03/24/23 08:54	03/25/23 22:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/25/23 22:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/25/23 22:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	03/24/23 08:54	03/25/23 22:49	1
o-Terphenyl	99		70 - 130	03/24/23 08:54	03/25/23 22:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	268		5.05	mg/Kg			03/29/23 21:26	1

Client Sample ID: FS26

Lab Sample ID: 890-4349-2

Date Collected: 03/17/23 11:05

Matrix: Solid

Date Received: 03/17/23 13:56

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		03/29/23 08:30	03/29/23 16:32	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 16:32	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 16:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/29/23 08:30	03/29/23 16:32	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 16:32	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/29/23 08:30	03/29/23 16:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/29/23 08:30	03/29/23 16:32	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: FS26

Lab Sample ID: 890-4349-2

Date Collected: 03/17/23 11:05

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102		70 - 130	03/29/23 08:30	03/29/23 16:32	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			03/30/23 13:24	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			03/26/23 08:58	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		03/24/23 08:54	03/25/23 23:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/25/23 23:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/25/23 23:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			03/24/23 08:54	03/25/23 23:12	1
o-Terphenyl	95		70 - 130			03/24/23 08:54	03/25/23 23:12	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	430		5.05	mg/Kg			03/29/23 21:30	1

Client Sample ID: FS27

Lab Sample ID: 890-4349-3

Date Collected: 03/17/23 11:10

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 4

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		03/29/23 08:30	03/29/23 16:52	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/29/23 08:30	03/29/23 16:52	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/29/23 08:30	03/29/23 16:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/29/23 08:30	03/29/23 16:52	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/29/23 08:30	03/29/23 16:52	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/29/23 08:30	03/29/23 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	03/29/23 08:30	03/29/23 16:52	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/29/23 08:30	03/29/23 16:52	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			03/30/23 13:24	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			03/27/23 11:12	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: FS27

Lab Sample ID: 890-4349-3

Date Collected: 03/17/23 11:10

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 4

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		03/24/23 08:54	03/25/23 23:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/25/23 23:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/25/23 23:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			03/24/23 08:54	03/25/23 23:34	1
o-Terphenyl	111		70 - 130			03/24/23 08:54	03/25/23 23:34	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7750		49.9	mg/Kg			03/29/23 21:45	10

Client Sample ID: FS28

Lab Sample ID: 890-4349-4

Date Collected: 03/17/23 11:15

Matrix: Solid

Date Received: 03/17/23 13:56

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		03/29/23 08:30	03/29/23 17:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/29/23 08:30	03/29/23 17:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/29/23 08:30	03/29/23 17:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/29/23 08:30	03/29/23 17:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/29/23 08:30	03/29/23 17:13	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/29/23 08:30	03/29/23 17:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			03/29/23 08:30	03/29/23 17:13	1
1,4-Difluorobenzene (Surr)	101		70 - 130			03/29/23 08:30	03/29/23 17:13	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			03/30/23 13:24	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			03/27/23 11:12	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		03/24/23 08:54	03/25/23 23:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/25/23 23:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/25/23 23:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			03/24/23 08:54	03/25/23 23:56	1
o-Terphenyl	122		70 - 130			03/24/23 08:54	03/25/23 23:56	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: FS28

Lab Sample ID: 890-4349-4

Date Collected: 03/17/23 11:15

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5610		49.7	mg/Kg			03/29/23 21:50	10

Client Sample ID: FS29

Lab Sample ID: 890-4349-5

Date Collected: 03/17/23 11:20

Matrix: Solid

Date Received: 03/17/23 13:56

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		03/29/23 08:30	03/29/23 17:34	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 17:34	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 17:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/29/23 08:30	03/29/23 17:34	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 17:34	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/29/23 08:30	03/29/23 17:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			03/29/23 08:30	03/29/23 17:34	1
1,4-Difluorobenzene (Surr)	101		70 - 130			03/29/23 08:30	03/29/23 17:34	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			03/30/23 13:24	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			03/27/23 11:12	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		03/24/23 08:54	03/26/23 00:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/26/23 00:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/26/23 00:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			03/24/23 08:54	03/26/23 00:17	1
o-Terphenyl	97		70 - 130			03/24/23 08:54	03/26/23 00:17	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8180		49.6	mg/Kg			03/29/23 21:55	10

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: SW04

Lab Sample ID: 890-4349-6

Date Collected: 03/17/23 11:25

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 0 - 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		03/29/23 08:30	03/29/23 17:55	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 17:55	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 17:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/29/23 08:30	03/29/23 17:55	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/29/23 08:30	03/29/23 17:55	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/29/23 08:30	03/29/23 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	03/29/23 08:30	03/29/23 17:55	1
1,4-Difluorobenzene (Surr)	99		70 - 130	03/29/23 08:30	03/29/23 17:55	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			03/30/23 13:24	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			03/27/23 11:12	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		03/24/23 08:54	03/26/23 00:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/26/23 00:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/26/23 00:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	03/24/23 08:54	03/26/23 00:38	1
o-Terphenyl	103		70 - 130	03/24/23 08:54	03/26/23 00:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	108		5.00	mg/Kg			03/29/23 21:59	1

Client Sample ID: SW05

Lab Sample ID: 890-4349-7

Date Collected: 03/17/23 11:30

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 0 - 4

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		03/30/23 08:44	03/30/23 12:11	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/30/23 08:44	03/30/23 12:11	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/30/23 08:44	03/30/23 12:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/30/23 08:44	03/30/23 12:11	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/30/23 08:44	03/30/23 12:11	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/30/23 08:44	03/30/23 12:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	03/30/23 08:44	03/30/23 12:11	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: SW05

Lab Sample ID: 890-4349-7

Date Collected: 03/17/23 11:30

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/30/23 08:44	03/30/23 13:12	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/30/23 08:44	03/30/23 12:11	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/30/23 08:44	03/30/23 13:12	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			03/30/23 13:37	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			03/27/23 11:12	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		03/24/23 08:54	03/26/23 01:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/26/23 01:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/26/23 01:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			03/24/23 08:54	03/26/23 01:00	1
o-Terphenyl	98		70 - 130			03/24/23 08:54	03/26/23 01:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.5		5.04	mg/Kg			03/29/23 22:04	1

Client Sample ID: SW06

Lab Sample ID: 890-4349-8

Date Collected: 03/17/23 11:35

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 0 - 4

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		03/30/23 08:44	03/30/23 12:31	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/30/23 08:44	03/30/23 12:31	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/30/23 08:44	03/30/23 12:31	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/30/23 08:44	03/30/23 12:31	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/30/23 08:44	03/30/23 12:31	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/30/23 08:44	03/30/23 12:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			03/30/23 08:44	03/30/23 12:31	1
1,4-Difluorobenzene (Surr)	86		70 - 130			03/30/23 08:44	03/30/23 12:31	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			03/30/23 13:37	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: SW06

Lab Sample ID: 890-4349-8

Date Collected: 03/17/23 11:35

Matrix: Solid

Date Received: 03/17/23 13:56

Sample Depth: 0 - 4

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			03/27/23 11:12	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		03/24/23 08:54	03/26/23 01:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/26/23 01:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 08:54	03/26/23 01:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	03/24/23 08:54	03/26/23 01:22	1
o-Terphenyl	94		70 - 130	03/24/23 08:54	03/26/23 01:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.6		5.03	mg/Kg			03/29/23 22:09	1

Surrogate Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(70-130)				
880-26413-A-1-C MS	Matrix Spike	95	112				
880-26413-A-1-D MSD	Matrix Spike Duplicate	107	103				
890-4349-1	FS25	105	103				
890-4349-2	FS26	104	102				
890-4349-3	FS27	110	103				
890-4349-4	FS28	108	101				
890-4349-5	FS29	109	101				
890-4349-6	SW04	115	99				
890-4349-7	SW05	88	107				
890-4349-7	SW05	96	98				
890-4349-8	SW06	98	86				
890-4353-A-10-C MS	Matrix Spike	97	88				
890-4353-A-10-D MSD	Matrix Spike Duplicate	98	90				
LCS 880-49788/1-A	Lab Control Sample	101	84				
LCS 880-49806/1-A	Lab Control Sample	90	114				
LCSD 880-49788/2-A	Lab Control Sample Dup	102	85				
LCSD 880-49806/2-A	Lab Control Sample Dup	92	114				
MB 880-49788/5-A	Method Blank	100	78				
MB 880-49806/5-A	Method Blank	72	97				
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)							
Lab Sample ID	Client Sample ID	1CO1	OTPH1						
		(70-130)	(70-130)						
880-26043-A-23-B MS	Matrix Spike	98	103						
880-26043-A-23-C MSD	Matrix Spike Duplicate	99	103						
890-4349-1	FS25	87	99						
890-4349-2	FS26	83	95						
890-4349-3	FS27	97	111						
890-4349-4	FS28	104	122						
890-4349-5	FS29	83	97						
890-4349-6	SW04	92	103						
890-4349-7	SW05	86	98						
890-4349-8	SW06	83	94						
LCS 880-49373/2-A	Lab Control Sample	106	123						
LCSD 880-49373/3-A	Lab Control Sample Dup	127	148 S1+						
MB 880-49373/1-A	Method Blank	102	124						
Surrogate Legend									
1CO = 1-Chlorooctane									
OTPH = o-Terphenyl									

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49788/5-A

Matrix: Solid

Analysis Batch: 49786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49788

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/29/23 08:30	03/29/23 10:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/29/23 08:30	03/29/23 10:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/29/23 08:30	03/29/23 10:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/29/23 08:30	03/29/23 10:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/29/23 08:30	03/29/23 10:57	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/29/23 08:30	03/29/23 10:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/29/23 08:30	03/29/23 10:57	1
1,4-Difluorobenzene (Surr)	78		70 - 130	03/29/23 08:30	03/29/23 10:57	1

Lab Sample ID: LCS 880-49788/1-A

Matrix: Solid

Analysis Batch: 49786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49788

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07023		mg/Kg		70	70 - 130
Toluene	0.100	0.07891		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.07460		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	0.200	0.1540		mg/Kg		77	70 - 130
o-Xylene	0.100	0.08101		mg/Kg		81	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: LCSD 880-49788/2-A

Matrix: Solid

Analysis Batch: 49786

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49788

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07218		mg/Kg		72	70 - 130	3	35
Toluene	0.100	0.07919		mg/Kg		79	70 - 130	0	35
Ethylbenzene	0.100	0.07442		mg/Kg		74	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1522		mg/Kg		76	70 - 130	1	35
o-Xylene	0.100	0.07976		mg/Kg		80	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: 890-4353-A-10-C MS

Matrix: Solid

Analysis Batch: 49786

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49788

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.08644		mg/Kg		87	70 - 130
Toluene	<0.00199	U	0.0998	0.09380		mg/Kg		94	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

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

Lab Sample ID: 890-4353-A-10-C MS

Matrix: Solid

Analysis Batch: 49786

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49788

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.08975		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1835		mg/Kg		92	70 - 130
o-Xylene	<0.00199	U	0.0998	0.09064		mg/Kg		91	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 890-4353-A-10-D MSD

Matrix: Solid

Analysis Batch: 49786

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49788

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.09888		mg/Kg		100	70 - 130	13	35
Toluene	<0.00199	U	0.0990	0.1051		mg/Kg		106	70 - 130	11	35
Ethylbenzene	<0.00199	U	0.0990	0.09871		mg/Kg		100	70 - 130	10	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1996		mg/Kg		101	70 - 130	8	35
o-Xylene	<0.00199	U	0.0990	0.09804		mg/Kg		99	70 - 130	8	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-49806/5-A

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49806

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/29/23 10:15	03/30/23 10:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/29/23 10:15	03/30/23 10:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/29/23 10:15	03/30/23 10:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/29/23 10:15	03/30/23 10:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/29/23 10:15	03/30/23 10:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/29/23 10:15	03/30/23 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	03/29/23 10:15	03/30/23 10:47	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/29/23 10:15	03/30/23 10:47	1

Lab Sample ID: LCS 880-49806/1-A

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1279		mg/Kg		128	70 - 130
Toluene	0.100	0.1063		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.09803		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2012		mg/Kg		101	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

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

Lab Sample ID: LCS 880-49806/1-A

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.1006		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: LCSD 880-49806/2-A

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1170		mg/Kg		117	70 - 130	9	35
Toluene	0.100	0.09934		mg/Kg		99	70 - 130	7	35
Ethylbenzene	0.100	0.09051		mg/Kg		91	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1833		mg/Kg		92	70 - 130	9	35
o-Xylene	0.100	0.09201		mg/Kg		92	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: 880-26413-A-1-C MS

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0998	0.1080		mg/Kg		108	70 - 130
Toluene	<0.00198	U	0.0998	0.09466		mg/Kg		95	70 - 130
Ethylbenzene	<0.00198	U	0.0998	0.08655		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1762		mg/Kg		88	70 - 130
o-Xylene	<0.00198	U	0.0998	0.08842		mg/Kg		88	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-26413-A-1-D MSD

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.101	0.1012		mg/Kg		100	70 - 130	6	35
Toluene	<0.00198	U	0.101	0.1004		mg/Kg		100	70 - 130	6	35
Ethylbenzene	<0.00198	U	0.101	0.09804		mg/Kg		97	70 - 130	12	35
m-Xylene & p-Xylene	<0.00396	U	0.202	0.2080		mg/Kg		103	70 - 130	17	35
o-Xylene	<0.00198	U	0.101	0.1049		mg/Kg		104	70 - 130	17	35

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

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

Lab Sample ID: 880-26413-A-1-D MSD

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49806

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

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

Lab Sample ID: MB 880-49373/1-A

Matrix: Solid

Analysis Batch: 49475

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49373

	MB	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/25/23 20:34	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/25/23 20:34	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 08:54	03/25/23 20:34	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
1-Chlorooctane	102		70 - 130			03/24/23 08:54	03/25/23 20:34	1	
o-Terphenyl	124		70 - 130			03/24/23 08:54	03/25/23 20:34	1	

Lab Sample ID: LCS 880-49373/2-A

Matrix: Solid

Analysis Batch: 49475

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49373

	Spike	LCS	LCS					%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	891.6		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	870.2		mg/Kg		87	70 - 130		
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	106		70 - 130						
o-Terphenyl	123		70 - 130						

Lab Sample ID: LCSD 880-49373/3-A

Matrix: Solid

Analysis Batch: 49475

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49373

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	953.4		mg/Kg		95	70 - 130	7	20	
Diesel Range Organics (Over C10-C28)	1000	948.9		mg/Kg		95	70 - 130	9	20	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	127		70 - 130							
o-Terphenyl	148	S1+	70 - 130							

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

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

Lab Sample ID: 880-26043-A-23-B MS

Matrix: Solid

Analysis Batch: 49475

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49373

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	958.0		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	122		998	1094		mg/Kg		97	70 - 130		
Surrogate	MS	MS	Limits								
	%Recovery	Qualifier									
1-Chlorooctane	98		70 - 130								
o-Terphenyl	103		70 - 130								

Lab Sample ID: 880-26043-A-23-C MSD

Matrix: Solid

Analysis Batch: 49475

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49373

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	947.3		mg/Kg		91	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	122		999	1253		mg/Kg		113	70 - 130	14	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-49797/1-A

Matrix: Solid

Analysis Batch: 49898

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			03/29/23 20:47	1

Lab Sample ID: LCS 880-49797/2-A

Matrix: Solid

Analysis Batch: 49898

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	262.4		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-49797/3-A

Matrix: Solid

Analysis Batch: 49898

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	261.9		mg/Kg		105	90 - 110	0	20

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-4349-8 MS										Client Sample ID: SW06		
Matrix: Solid										Prep Type: Soluble		
Analysis Batch: 49898												
	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	37.6		252	313.3		mg/Kg		110	90 - 110			

Lab Sample ID: 890-4349-8 MSD										Client Sample ID: SW06		
Matrix: Solid										Prep Type: Soluble		
Analysis Batch: 49898												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	37.6		252	312.6		mg/Kg		109	90 - 110	0	20	

QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

GC VOA

Analysis Batch: 49786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-1	FS25	Total/NA	Solid	8021B	49788
890-4349-2	FS26	Total/NA	Solid	8021B	49788
890-4349-3	FS27	Total/NA	Solid	8021B	49788
890-4349-4	FS28	Total/NA	Solid	8021B	49788
890-4349-5	FS29	Total/NA	Solid	8021B	49788
890-4349-6	SW04	Total/NA	Solid	8021B	49788
MB 880-49788/5-A	Method Blank	Total/NA	Solid	8021B	49788
LCS 880-49788/1-A	Lab Control Sample	Total/NA	Solid	8021B	49788
LCSD 880-49788/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49788
890-4353-A-10-C MS	Matrix Spike	Total/NA	Solid	8021B	49788
890-4353-A-10-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49788

Prep Batch: 49788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-1	FS25	Total/NA	Solid	5035	
890-4349-2	FS26	Total/NA	Solid	5035	
890-4349-3	FS27	Total/NA	Solid	5035	
890-4349-4	FS28	Total/NA	Solid	5035	
890-4349-5	FS29	Total/NA	Solid	5035	
890-4349-6	SW04	Total/NA	Solid	5035	
MB 880-49788/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49788/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49788/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4353-A-10-C MS	Matrix Spike	Total/NA	Solid	5035	
890-4353-A-10-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 49806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-7	SW05	Total/NA	Solid	5035	
890-4349-8	SW06	Total/NA	Solid	5035	
MB 880-49806/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49806/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49806/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26413-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-26413-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-7	SW05	Total/NA	Solid	8021B	49806
890-4349-7	SW05	Total/NA	Solid	8021B	49806
890-4349-8	SW06	Total/NA	Solid	8021B	49806
MB 880-49806/5-A	Method Blank	Total/NA	Solid	8021B	49806
LCS 880-49806/1-A	Lab Control Sample	Total/NA	Solid	8021B	49806
LCSD 880-49806/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49806
880-26413-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	49806
880-26413-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49806

Analysis Batch: 49958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-1	FS25	Total/NA	Solid	Total BTEX	
890-4349-2	FS26	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

GC VOA (Continued)

Analysis Batch: 49958 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-3	FS27	Total/NA	Solid	Total BTEX	
890-4349-4	FS28	Total/NA	Solid	Total BTEX	
890-4349-5	FS29	Total/NA	Solid	Total BTEX	
890-4349-6	SW04	Total/NA	Solid	Total BTEX	
890-4349-7	SW05	Total/NA	Solid	Total BTEX	
890-4349-8	SW06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 49373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-1	FS25	Total/NA	Solid	8015NM Prep	
890-4349-2	FS26	Total/NA	Solid	8015NM Prep	
890-4349-3	FS27	Total/NA	Solid	8015NM Prep	
890-4349-4	FS28	Total/NA	Solid	8015NM Prep	
890-4349-5	FS29	Total/NA	Solid	8015NM Prep	
890-4349-6	SW04	Total/NA	Solid	8015NM Prep	
890-4349-7	SW05	Total/NA	Solid	8015NM Prep	
890-4349-8	SW06	Total/NA	Solid	8015NM Prep	
MB 880-49373/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49373/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49373/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26043-A-23-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26043-A-23-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-1	FS25	Total/NA	Solid	8015B NM	49373
890-4349-2	FS26	Total/NA	Solid	8015B NM	49373
890-4349-3	FS27	Total/NA	Solid	8015B NM	49373
890-4349-4	FS28	Total/NA	Solid	8015B NM	49373
890-4349-5	FS29	Total/NA	Solid	8015B NM	49373
890-4349-6	SW04	Total/NA	Solid	8015B NM	49373
890-4349-7	SW05	Total/NA	Solid	8015B NM	49373
890-4349-8	SW06	Total/NA	Solid	8015B NM	49373
MB 880-49373/1-A	Method Blank	Total/NA	Solid	8015B NM	49373
LCS 880-49373/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49373
LCSD 880-49373/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49373
880-26043-A-23-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49373
880-26043-A-23-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49373

Analysis Batch: 49528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-1	FS25	Total/NA	Solid	8015 NM	
890-4349-2	FS26	Total/NA	Solid	8015 NM	
890-4349-3	FS27	Total/NA	Solid	8015 NM	
890-4349-4	FS28	Total/NA	Solid	8015 NM	
890-4349-5	FS29	Total/NA	Solid	8015 NM	
890-4349-6	SW04	Total/NA	Solid	8015 NM	
890-4349-7	SW05	Total/NA	Solid	8015 NM	
890-4349-8	SW06	Total/NA	Solid	8015 NM	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

HPLC/IC

Leach Batch: 49797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-1	FS25	Soluble	Solid	DI Leach	
890-4349-2	FS26	Soluble	Solid	DI Leach	
890-4349-3	FS27	Soluble	Solid	DI Leach	
890-4349-4	FS28	Soluble	Solid	DI Leach	
890-4349-5	FS29	Soluble	Solid	DI Leach	
890-4349-6	SW04	Soluble	Solid	DI Leach	
890-4349-7	SW05	Soluble	Solid	DI Leach	
890-4349-8	SW06	Soluble	Solid	DI Leach	
MB 880-49797/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49797/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49797/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4349-8 MS	SW06	Soluble	Solid	DI Leach	
890-4349-8 MSD	SW06	Soluble	Solid	DI Leach	

Analysis Batch: 49898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4349-1	FS25	Soluble	Solid	300.0	49797
890-4349-2	FS26	Soluble	Solid	300.0	49797
890-4349-3	FS27	Soluble	Solid	300.0	49797
890-4349-4	FS28	Soluble	Solid	300.0	49797
890-4349-5	FS29	Soluble	Solid	300.0	49797
890-4349-6	SW04	Soluble	Solid	300.0	49797
890-4349-7	SW05	Soluble	Solid	300.0	49797
890-4349-8	SW06	Soluble	Solid	300.0	49797
MB 880-49797/1-A	Method Blank	Soluble	Solid	300.0	49797
LCS 880-49797/2-A	Lab Control Sample	Soluble	Solid	300.0	49797
LCSD 880-49797/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49797
890-4349-8 MS	SW06	Soluble	Solid	300.0	49797
890-4349-8 MSD	SW06	Soluble	Solid	300.0	49797

Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: FS25

Lab Sample ID: 890-4349-1

Date Collected: 03/17/23 11:00

Matrix: Solid

Date Received: 03/17/23 13:56

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	49788	03/29/23 08:30	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49786	03/29/23 16:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49958	03/30/23 13:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			49528	03/26/23 08:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49373	03/24/23 08:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49475	03/25/23 22:49	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49898	03/29/23 21:26	SMC	EET MID

Client Sample ID: FS26

Lab Sample ID: 890-4349-2

Date Collected: 03/17/23 11:05

Matrix: Solid

Date Received: 03/17/23 13:56

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	49788	03/29/23 08:30	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49786	03/29/23 16:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49958	03/30/23 13:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			49528	03/26/23 08:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49373	03/24/23 08:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49475	03/25/23 23:12	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49898	03/29/23 21:30	SMC	EET MID

Client Sample ID: FS27

Lab Sample ID: 890-4349-3

Date Collected: 03/17/23 11:10

Matrix: Solid

Date Received: 03/17/23 13:56

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	49788	03/29/23 08:30	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49786	03/29/23 16:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49958	03/30/23 13:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			49528	03/27/23 11:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49373	03/24/23 08:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49475	03/25/23 23:34	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49898	03/29/23 21:45	SMC	EET MID

Client Sample ID: FS28

Lab Sample ID: 890-4349-4

Date Collected: 03/17/23 11:15

Matrix: Solid

Date Received: 03/17/23 13:56

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	49788	03/29/23 08:30	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49786	03/29/23 17:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49958	03/30/23 13:24	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: FS28

Lab Sample ID: 890-4349-4

Date Collected: 03/17/23 11:15

Matrix: Solid

Date Received: 03/17/23 13:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			49528	03/27/23 11:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49373	03/24/23 08:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49475	03/25/23 23:56	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49898	03/29/23 21:50	SMC	EET MID

Client Sample ID: FS29

Lab Sample ID: 890-4349-5

Date Collected: 03/17/23 11:20

Matrix: Solid

Date Received: 03/17/23 13:56

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	49788	03/29/23 08:30	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49786	03/29/23 17:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49958	03/30/23 13:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			49528	03/27/23 11:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49373	03/24/23 08:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49475	03/26/23 00:17	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	49898	03/29/23 21:55	SMC	EET MID

Client Sample ID: SW04

Lab Sample ID: 890-4349-6

Date Collected: 03/17/23 11:25

Matrix: Solid

Date Received: 03/17/23 13:56

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	49788	03/29/23 08:30	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49786	03/29/23 17:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49958	03/30/23 13:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			49528	03/27/23 11:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49373	03/24/23 08:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49475	03/26/23 00:38	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49898	03/29/23 21:59	SMC	EET MID

Client Sample ID: SW05

Lab Sample ID: 890-4349-7

Date Collected: 03/17/23 11:30

Matrix: Solid

Date Received: 03/17/23 13:56

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	49806	03/30/23 08:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49916	03/30/23 12:11	MNR	EET MID
Total/NA	Prep	5035			4.97 g	5 mL	49806	03/30/23 08:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49916	03/30/23 13:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49958	03/30/23 13:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			49528	03/27/23 11:12	AJ	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Client Sample ID: SW05
Date Collected: 03/17/23 11:30
Date Received: 03/17/23 13:56

Lab Sample ID: 890-4349-7
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	8015NM Prep			10.01 g	10 mL	49373	03/24/23 08:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49475	03/26/23 01:00	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49898	03/29/23 22:04	SMC	EET MID

Client Sample ID: SW06
Date Collected: 03/17/23 11:35
Date Received: 03/17/23 13:56

Lab Sample ID: 890-4349-8
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	49806	03/30/23 08:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49916	03/30/23 12:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49958	03/30/23 13:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			49528	03/27/23 11:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49373	03/24/23 08:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49475	03/26/23 01:22	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	49797	03/29/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49898	03/29/23 22:09	SMC	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

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	T104704400-22-25	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: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4349-1
SDG: 03D2057027

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4349-1	FS25	Solid	03/17/23 11:00	03/17/23 13:56	4
890-4349-2	FS26	Solid	03/17/23 11:05	03/17/23 13:56	4
890-4349-3	FS27	Solid	03/17/23 11:10	03/17/23 13:56	4
890-4349-4	FS28	Solid	03/17/23 11:15	03/17/23 13:56	4
890-4349-5	FS29	Solid	03/17/23 11:20	03/17/23 13:56	4
890-4349-6	SW04	Solid	03/17/23 11:25	03/17/23 13:56	0 - 4
890-4349-7	SW05	Solid	03/17/23 11:30	03/17/23 13:56	0 - 4
890-4349-8	SW06	Solid	03/17/23 11:35	03/17/23 13:56	0 - 4

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Ver- 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4349-1

SDG Number: 03D2057027

Login Number: 4349

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: 890-4349-1

SDG Number: 03D2057027

Login Number: 4349

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 03/21/23 11:22 AM

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



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 4/3/2023 3:13:25 PM

JOB DESCRIPTION

MCA 145-Maverick
SDG NUMBER 03D2057027

JOB NUMBER

890-4366-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
4/3/2023 3:13:25 PM

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

Client: Ensolum
Project/Site: MCA 145-Maverick

Laboratory Job ID: 890-4366-1
SDG: 03D2057027

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Definitions/Glossary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Qualifiers

GC VOA

Qualifier	Qualifier Description
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
SQL	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: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Job ID: 890-4366-1

Laboratory: Eurofins Carlsbad

Narrative	
	Job Narrative 890-4366-1

Receipt

The samples were received on 3/20/2023 1:34 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 1.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS30 (890-4366-1), FS31 (890-4366-2), FS32 (890-4366-3), FS33 (890-4366-4), FS34 (890-4366-5), SW14 (890-4366-6), SW15 (890-4366-7), SW16 (890-4366-8), SW17 (890-4366-9) and SW18 (890-4366-10).

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: FS30

Lab Sample ID: 890-4366-1

Date Collected: 03/20/23 10:15

Matrix: Solid

Date Received: 03/20/23 13:34

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		03/27/23 16:06	04/01/23 02:46	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 02:46	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 02:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/27/23 16:06	04/01/23 02:46	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 02:46	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/27/23 16:06	04/01/23 02:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	03/27/23 16:06	04/01/23 02:46	1
1,4-Difluorobenzene (Surr)	79		70 - 130	03/27/23 16:06	04/01/23 02:46	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			04/03/23 15:53	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			03/27/23 17:15	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		03/24/23 16:55	03/27/23 12:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/24/23 16:55	03/27/23 12:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/23 16:55	03/27/23 12:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	03/24/23 16:55	03/27/23 12:54	1
o-Terphenyl	91		70 - 130	03/24/23 16:55	03/27/23 12:54	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13700		100	mg/Kg			03/30/23 22:44	20

Client Sample ID: FS31

Lab Sample ID: 890-4366-2

Date Collected: 03/20/23 10:20

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 4

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		03/27/23 16:06	04/01/23 03:06	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/27/23 16:06	04/01/23 03:06	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/27/23 16:06	04/01/23 03:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/27/23 16:06	04/01/23 03:06	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/27/23 16:06	04/01/23 03:06	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/27/23 16:06	04/01/23 03:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	03/27/23 16:06	04/01/23 03:06	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: FS31

Lab Sample ID: 890-4366-2

Date Collected: 03/20/23 10:20

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	78		70 - 130	03/27/23 16:06	04/01/23 03:06	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			04/03/23 15:53	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			03/27/23 17:15	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		03/24/23 16:55	03/27/23 13:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/24/23 16:55	03/27/23 13:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/23 16:55	03/27/23 13:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			03/24/23 16:55	03/27/23 13:16	1
o-Terphenyl	91		70 - 130			03/24/23 16:55	03/27/23 13:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7450		50.0	mg/Kg			03/30/23 22:58	10

Client Sample ID: FS32

Lab Sample ID: 890-4366-3

Date Collected: 03/20/23 10:25

Matrix: Solid

Date Received: 03/20/23 13:34

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		03/27/23 16:06	04/01/23 03:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 03:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 03:27	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/27/23 16:06	04/01/23 03:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 03:27	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/27/23 16:06	04/01/23 03:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	03/27/23 16:06	04/01/23 03:27	1
1,4-Difluorobenzene (Surr)	70		70 - 130	03/27/23 16:06	04/01/23 03:27	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			04/03/23 15:53	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			03/27/23 17:15	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: FS32

Lab Sample ID: 890-4366-3

Date Collected: 03/20/23 10:25

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 4

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		03/24/23 16:55	03/27/23 13:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 16:55	03/27/23 13:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 16:55	03/27/23 13:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			03/24/23 16:55	03/27/23 13:37	1
o-Terphenyl	92		70 - 130			03/24/23 16:55	03/27/23 13:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13800		99.6	mg/Kg			03/30/23 23:03	20

Client Sample ID: FS33

Lab Sample ID: 890-4366-4

Date Collected: 03/20/23 10:30

Matrix: Solid

Date Received: 03/20/23 13:34

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		03/27/23 16:06	04/01/23 03:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 03:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 03:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/27/23 16:06	04/01/23 03:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 03:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/27/23 16:06	04/01/23 03:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130			03/27/23 16:06	04/01/23 03:47	1
1,4-Difluorobenzene (Surr)	83		70 - 130			03/27/23 16:06	04/01/23 03:47	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			04/03/23 15:53	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			03/27/23 17:15	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		03/24/23 16:55	03/27/23 13:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 13:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 13:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			03/24/23 16:55	03/27/23 13:58	1
o-Terphenyl	93		70 - 130			03/24/23 16:55	03/27/23 13:58	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: FS33

Lab Sample ID: 890-4366-4

Date Collected: 03/20/23 10:30

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22600		252	mg/Kg			03/30/23 23:08	50

Client Sample ID: FS34

Lab Sample ID: 890-4366-5

Date Collected: 03/20/23 10:35

Matrix: Solid

Date Received: 03/20/23 13:34

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		03/27/23 16:06	04/01/23 04:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 04:08	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 04:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/27/23 16:06	04/01/23 04:08	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 04:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/27/23 16:06	04/01/23 04:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			03/27/23 16:06	04/01/23 04:08	1
1,4-Difluorobenzene (Surr)	78		70 - 130			03/27/23 16:06	04/01/23 04:08	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			04/03/23 15:53	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			03/27/23 17:15	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		03/24/23 16:55	03/27/23 14:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 14:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 14:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			03/24/23 16:55	03/27/23 14:20	1
o-Terphenyl	90		70 - 130			03/24/23 16:55	03/27/23 14:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11200		101	mg/Kg			03/30/23 23:13	20

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: SW14

Lab Sample ID: 890-4366-6

Date Collected: 03/20/23 10:40

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 0 - 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		03/27/23 16:06	04/01/23 04:28	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 04:28	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 04:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/27/23 16:06	04/01/23 04:28	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 04:28	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/27/23 16:06	04/01/23 04:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	03/27/23 16:06	04/01/23 04:28	1
1,4-Difluorobenzene (Surr)	85		70 - 130	03/27/23 16:06	04/01/23 04:28	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			04/03/23 15:53	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			03/27/23 17:15	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		03/24/23 16:55	03/27/23 14:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/24/23 16:55	03/27/23 14:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/23 16:55	03/27/23 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/24/23 16:55	03/27/23 14:41	1
o-Terphenyl	94		70 - 130	03/24/23 16:55	03/27/23 14:41	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.9		5.00	mg/Kg			03/30/23 23:27	1

Client Sample ID: SW15

Lab Sample ID: 890-4366-7

Date Collected: 03/20/23 10:45

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 0 - 4

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		03/27/23 16:06	04/01/23 04:48	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/27/23 16:06	04/01/23 04:48	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/27/23 16:06	04/01/23 04:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/27/23 16:06	04/01/23 04:48	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/27/23 16:06	04/01/23 04:48	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/27/23 16:06	04/01/23 04:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	03/27/23 16:06	04/01/23 04:48	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: SW15

Lab Sample ID: 890-4366-7

Date Collected: 03/20/23 10:45

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130	03/27/23 16:06	04/01/23 04:48	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			04/03/23 15:53	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			03/27/23 17:15	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		03/24/23 16:55	03/27/23 15:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 15:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 15:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			03/24/23 16:55	03/27/23 15:03	1
o-Terphenyl	87		70 - 130			03/24/23 16:55	03/27/23 15:03	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	108		4.97	mg/Kg			03/30/23 23:32	1

Client Sample ID: SW16

Lab Sample ID: 890-4366-8

Date Collected: 03/20/23 10:50

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 0 - 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		03/27/23 16:06	04/01/23 05:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 05:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 05:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/27/23 16:06	04/01/23 05:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/27/23 16:06	04/01/23 05:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/27/23 16:06	04/01/23 05:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	03/27/23 16:06	04/01/23 05:09	1
1,4-Difluorobenzene (Surr)	87		70 - 130	03/27/23 16:06	04/01/23 05:09	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			04/03/23 15:53	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			03/27/23 17:15	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: SW16

Lab Sample ID: 890-4366-8

Date Collected: 03/20/23 10:50

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 0 - 4

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		03/24/23 16:55	03/27/23 15:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/23 16:55	03/27/23 15:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 16:55	03/27/23 15:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			03/24/23 16:55	03/27/23 15:24	1
o-Terphenyl	86		70 - 130			03/24/23 16:55	03/27/23 15:24	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.0		5.02	mg/Kg			03/29/23 14:15	1

Client Sample ID: SW17

Lab Sample ID: 890-4366-9

Date Collected: 03/20/23 10:55

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 0 - 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		03/27/23 16:06	04/01/23 05:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 05:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 05:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/27/23 16:06	04/01/23 05:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 05:29	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/27/23 16:06	04/01/23 05:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			03/27/23 16:06	04/01/23 05:29	1
1,4-Difluorobenzene (Surr)	87		70 - 130			03/27/23 16:06	04/01/23 05:29	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			04/03/23 15:53	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			03/27/23 17:15	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		03/24/23 16:55	03/27/23 16:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 16:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 16:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			03/24/23 16:55	03/27/23 16:07	1
o-Terphenyl	87		70 - 130			03/24/23 16:55	03/27/23 16:07	1

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Client Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: SW17

Lab Sample ID: 890-4366-9

Date Collected: 03/20/23 10:55

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 0 - 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103		5.01	mg/Kg			03/29/23 14:19	1

Client Sample ID: SW18

Lab Sample ID: 890-4366-10

Date Collected: 03/20/23 11:00

Matrix: Solid

Date Received: 03/20/23 13:34

Sample Depth: 0 - 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		03/27/23 16:06	04/01/23 05:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 05:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 05:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/27/23 16:06	04/01/23 05:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	04/01/23 05:50	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/27/23 16:06	04/01/23 05:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			03/27/23 16:06	04/01/23 05:50	1
1,4-Difluorobenzene (Surr)	93		70 - 130			03/27/23 16:06	04/01/23 05:50	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			04/03/23 15:53	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			03/27/23 17:15	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		03/24/23 16:55	03/27/23 16:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 16:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/23 16:55	03/27/23 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			03/24/23 16:55	03/27/23 16:29	1
o-Terphenyl	90		70 - 130			03/24/23 16:55	03/27/23 16:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.1		4.99	mg/Kg			03/29/23 14:24	1

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Surrogate Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(70-130)				
890-4366-1	FS30	112	79				
890-4366-2	FS31	116	78				
890-4366-3	FS32	105	70				
890-4366-4	FS33	84	83				
890-4366-5	FS34	108	78				
890-4366-6	SW14	113	85				
890-4366-7	SW15	90	88				
890-4366-8	SW16	90	87				
890-4366-9	SW17	92	87				
890-4366-10	SW18	87	93				
890-4371-A-1-D MS	Matrix Spike	125	109				
890-4371-A-1-E MSD	Matrix Spike Duplicate	115	107				
LCS 880-49657/1-A	Lab Control Sample	116	107				
LCSD 880-49657/2-A	Lab Control Sample Dup	120	105				
MB 880-49654/5-A	Method Blank	74	81				
MB 880-49657/5-A	Method Blank	85	89				
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)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(70-130)				
890-4361-A-1-B MS	Matrix Spike	108	87				
890-4361-A-1-C MSD	Matrix Spike Duplicate	108	87				
890-4366-1	FS30	99	91				
890-4366-2	FS31	97	91				
890-4366-3	FS32	97	92				
890-4366-4	FS33	98	93				
890-4366-5	FS34	96	90				
890-4366-6	SW14	101	94				
890-4366-7	SW15	97	87				
890-4366-8	SW16	97	86				
890-4366-9	SW17	98	87				
890-4366-10	SW18	103	90				
LCS 880-49457/2-A	Lab Control Sample	93	83				
LCSD 880-49457/3-A	Lab Control Sample Dup	90	81				
MB 880-49457/1-A	Method Blank	120	118				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49654/5-A

Matrix: Solid

Analysis Batch: 49999

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49654

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:25	03/31/23 11:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:25	03/31/23 11:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:25	03/31/23 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/27/23 15:25	03/31/23 11:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 15:25	03/31/23 11:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/27/23 15:25	03/31/23 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	03/27/23 15:25	03/31/23 11:23	1
1,4-Difluorobenzene (Surr)	81		70 - 130	03/27/23 15:25	03/31/23 11:23	1

Lab Sample ID: MB 880-49657/5-A

Matrix: Solid

Analysis Batch: 49999

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49657

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	03/31/23 21:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	03/31/23 21:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	03/31/23 21:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/27/23 16:06	03/31/23 21:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/27/23 16:06	03/31/23 21:58	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/27/23 16:06	03/31/23 21:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	03/27/23 16:06	03/31/23 21:58	1
1,4-Difluorobenzene (Surr)	89		70 - 130	03/27/23 16:06	03/31/23 21:58	1

Lab Sample ID: LCS 880-49657/1-A

Matrix: Solid

Analysis Batch: 49999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09066		mg/Kg		91	70 - 130
Toluene	0.100	0.09152		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.09701		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2066		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1130		mg/Kg		113	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-49657/2-A

Matrix: Solid

Analysis Batch: 49999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09100		mg/Kg		91	70 - 130	0	35

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

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

Lab Sample ID: LCSD 880-49657/2-A

Matrix: Solid

Analysis Batch: 49999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09094		mg/Kg		91	70 - 130	1	35
Ethylbenzene	0.100	0.09972		mg/Kg		100	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2134		mg/Kg		107	70 - 130	3	35
o-Xylene	0.100	0.1143		mg/Kg		114	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-4371-A-1-D MS

Matrix: Solid

Analysis Batch: 49999

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0998	0.08943		mg/Kg		90	70 - 130
Toluene	<0.00201	U	0.0998	0.09016		mg/Kg		90	70 - 130
Ethylbenzene	<0.00201	U	0.0998	0.09631		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2037		mg/Kg		102	70 - 130
o-Xylene	<0.00201	U	0.0998	0.1082		mg/Kg		108	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-4371-A-1-E MSD

Matrix: Solid

Analysis Batch: 49999

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.09214		mg/Kg		93	70 - 130	3	35
Toluene	<0.00201	U	0.0990	0.08867		mg/Kg		90	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0990	0.09360		mg/Kg		95	70 - 130	3	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1992		mg/Kg		101	70 - 130	2	35
o-Xylene	<0.00201	U	0.0990	0.1055		mg/Kg		107	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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

Lab Sample ID: MB 880-49457/1-A

Matrix: Solid

Analysis Batch: 49559

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49457

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		03/24/23 16:55	03/27/23 08:47	1

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

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

Lab Sample ID: MB 880-49457/1-A

Matrix: Solid

Analysis Batch: 49559

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49457

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		03/24/23 16:55	03/27/23 08:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/23 16:55	03/27/23 08:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			03/24/23 16:55	03/27/23 08:47	1
o-Terphenyl	118		70 - 130			03/24/23 16:55	03/27/23 08:47	1

Lab Sample ID: LCS 880-49457/2-A

Matrix: Solid

Analysis Batch: 49559

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49457

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1022		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	876.8		mg/Kg		88	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	83		70 - 130				

Lab Sample ID: LCSD 880-49457/3-A

Matrix: Solid

Analysis Batch: 49559

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49457

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	861.9		mg/Kg		86	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	1000	864.3		mg/Kg		86	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	90		70 - 130						
o-Terphenyl	81		70 - 130						

Lab Sample ID: 890-4361-A-1-B MS

Matrix: Solid

Analysis Batch: 49559

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49457

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1038		mg/Kg		100	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	721.8		mg/Kg		70	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	87		70 - 130						

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

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

Lab Sample ID: 890-4361-A-1-C MSD

Matrix: Solid

Analysis Batch: 49559

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49457

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	<50.0	U	998	1062		mg/Kg		102	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	727.0		mg/Kg		70	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	108		70 - 130								
o-Terphenyl	87		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-49798/1-A

Matrix: Solid

Analysis Batch: 49899

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			03/29/23 13:20	1

Lab Sample ID: LCS 880-49798/2-A

Matrix: Solid

Analysis Batch: 49899

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	235.8		mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-49798/3-A

Matrix: Solid

Analysis Batch: 49899

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	237.6		mg/Kg		95	90 - 110	1	20

Lab Sample ID: 890-4355-A-2-F MS

Matrix: Solid

Analysis Batch: 49899

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	53.9		252	310.7		mg/Kg		102	90 - 110

Lab Sample ID: 890-4355-A-2-G MSD

Matrix: Solid

Analysis Batch: 49899

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	53.9		252	313.7		mg/Kg		103	90 - 110	1	20

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QC Sample Results

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-49884/1-A

Matrix: Solid

Analysis Batch: 50034

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			03/30/23 22:29	1

Lab Sample ID: LCS 880-49884/2-A

Matrix: Solid

Analysis Batch: 50034

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	261.5		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-49884/3-A

Matrix: Solid

Analysis Batch: 50034

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	261.8		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

GC VOA

Prep Batch: 49654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-49654/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 49657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-1	FS30	Total/NA	Solid	5035	
890-4366-2	FS31	Total/NA	Solid	5035	
890-4366-3	FS32	Total/NA	Solid	5035	
890-4366-4	FS33	Total/NA	Solid	5035	
890-4366-5	FS34	Total/NA	Solid	5035	
890-4366-6	SW14	Total/NA	Solid	5035	
890-4366-7	SW15	Total/NA	Solid	5035	
890-4366-8	SW16	Total/NA	Solid	5035	
890-4366-9	SW17	Total/NA	Solid	5035	
890-4366-10	SW18	Total/NA	Solid	5035	
MB 880-49657/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49657/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49657/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4371-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-4371-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-1	FS30	Total/NA	Solid	8021B	49657
890-4366-2	FS31	Total/NA	Solid	8021B	49657
890-4366-3	FS32	Total/NA	Solid	8021B	49657
890-4366-4	FS33	Total/NA	Solid	8021B	49657
890-4366-5	FS34	Total/NA	Solid	8021B	49657
890-4366-6	SW14	Total/NA	Solid	8021B	49657
890-4366-7	SW15	Total/NA	Solid	8021B	49657
890-4366-8	SW16	Total/NA	Solid	8021B	49657
890-4366-9	SW17	Total/NA	Solid	8021B	49657
890-4366-10	SW18	Total/NA	Solid	8021B	49657
MB 880-49654/5-A	Method Blank	Total/NA	Solid	8021B	49654
MB 880-49657/5-A	Method Blank	Total/NA	Solid	8021B	49657
LCS 880-49657/1-A	Lab Control Sample	Total/NA	Solid	8021B	49657
LCSD 880-49657/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49657
890-4371-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	49657
890-4371-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49657

Analysis Batch: 50241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-1	FS30	Total/NA	Solid	Total BTEX	
890-4366-2	FS31	Total/NA	Solid	Total BTEX	
890-4366-3	FS32	Total/NA	Solid	Total BTEX	
890-4366-4	FS33	Total/NA	Solid	Total BTEX	
890-4366-5	FS34	Total/NA	Solid	Total BTEX	
890-4366-6	SW14	Total/NA	Solid	Total BTEX	
890-4366-7	SW15	Total/NA	Solid	Total BTEX	
890-4366-8	SW16	Total/NA	Solid	Total BTEX	
890-4366-9	SW17	Total/NA	Solid	Total BTEX	
890-4366-10	SW18	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

GC Semi VOA

Prep Batch: 49457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-1	FS30	Total/NA	Solid	8015NM Prep	
890-4366-2	FS31	Total/NA	Solid	8015NM Prep	
890-4366-3	FS32	Total/NA	Solid	8015NM Prep	
890-4366-4	FS33	Total/NA	Solid	8015NM Prep	
890-4366-5	FS34	Total/NA	Solid	8015NM Prep	
890-4366-6	SW14	Total/NA	Solid	8015NM Prep	
890-4366-7	SW15	Total/NA	Solid	8015NM Prep	
890-4366-8	SW16	Total/NA	Solid	8015NM Prep	
890-4366-9	SW17	Total/NA	Solid	8015NM Prep	
890-4366-10	SW18	Total/NA	Solid	8015NM Prep	
MB 880-49457/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49457/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49457/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4361-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4361-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-1	FS30	Total/NA	Solid	8015B NM	49457
890-4366-2	FS31	Total/NA	Solid	8015B NM	49457
890-4366-3	FS32	Total/NA	Solid	8015B NM	49457
890-4366-4	FS33	Total/NA	Solid	8015B NM	49457
890-4366-5	FS34	Total/NA	Solid	8015B NM	49457
890-4366-6	SW14	Total/NA	Solid	8015B NM	49457
890-4366-7	SW15	Total/NA	Solid	8015B NM	49457
890-4366-8	SW16	Total/NA	Solid	8015B NM	49457
890-4366-9	SW17	Total/NA	Solid	8015B NM	49457
890-4366-10	SW18	Total/NA	Solid	8015B NM	49457
MB 880-49457/1-A	Method Blank	Total/NA	Solid	8015B NM	49457
LCS 880-49457/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49457
LCSD 880-49457/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49457
890-4361-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49457
890-4361-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49457

Analysis Batch: 49673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-1	FS30	Total/NA	Solid	8015 NM	
890-4366-2	FS31	Total/NA	Solid	8015 NM	
890-4366-3	FS32	Total/NA	Solid	8015 NM	
890-4366-4	FS33	Total/NA	Solid	8015 NM	
890-4366-5	FS34	Total/NA	Solid	8015 NM	
890-4366-6	SW14	Total/NA	Solid	8015 NM	
890-4366-7	SW15	Total/NA	Solid	8015 NM	
890-4366-8	SW16	Total/NA	Solid	8015 NM	
890-4366-9	SW17	Total/NA	Solid	8015 NM	
890-4366-10	SW18	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

HPLC/IC

Leach Batch: 49798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-8	SW16	Soluble	Solid	DI Leach	
890-4366-9	SW17	Soluble	Solid	DI Leach	
890-4366-10	SW18	Soluble	Solid	DI Leach	
MB 880-49798/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49798/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49798/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4355-A-2-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4355-A-2-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 49884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-1	FS30	Soluble	Solid	DI Leach	
890-4366-2	FS31	Soluble	Solid	DI Leach	
890-4366-3	FS32	Soluble	Solid	DI Leach	
890-4366-4	FS33	Soluble	Solid	DI Leach	
890-4366-5	FS34	Soluble	Solid	DI Leach	
890-4366-6	SW14	Soluble	Solid	DI Leach	
890-4366-7	SW15	Soluble	Solid	DI Leach	
MB 880-49884/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49884/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49884/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4366-1 MS	FS30	Soluble	Solid	DI Leach	
890-4366-1 MSD	FS30	Soluble	Solid	DI Leach	

Analysis Batch: 49899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-8	SW16	Soluble	Solid	300.0	49798
890-4366-9	SW17	Soluble	Solid	300.0	49798
890-4366-10	SW18	Soluble	Solid	300.0	49798
MB 880-49798/1-A	Method Blank	Soluble	Solid	300.0	49798
LCS 880-49798/2-A	Lab Control Sample	Soluble	Solid	300.0	49798
LCSD 880-49798/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49798
890-4355-A-2-F MS	Matrix Spike	Soluble	Solid	300.0	49798
890-4355-A-2-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	49798

Analysis Batch: 50034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4366-1	FS30	Soluble	Solid	300.0	49884
890-4366-2	FS31	Soluble	Solid	300.0	49884
890-4366-3	FS32	Soluble	Solid	300.0	49884
890-4366-4	FS33	Soluble	Solid	300.0	49884
890-4366-5	FS34	Soluble	Solid	300.0	49884
890-4366-6	SW14	Soluble	Solid	300.0	49884
890-4366-7	SW15	Soluble	Solid	300.0	49884
MB 880-49884/1-A	Method Blank	Soluble	Solid	300.0	49884
LCS 880-49884/2-A	Lab Control Sample	Soluble	Solid	300.0	49884
LCSD 880-49884/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49884
890-4366-1 MS	FS30	Soluble	Solid	300.0	49884
890-4366-1 MSD	FS30	Soluble	Solid	300.0	49884

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: FS30

Date Collected: 03/20/23 10:15

Date Received: 03/20/23 13:34

Lab Sample ID: 890-4366-1

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	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 02:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 12:54	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	49884	03/29/23 16:21	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	50034	03/30/23 22:44	SMC	EET MID

Client Sample ID: FS31

Date Collected: 03/20/23 10:20

Date Received: 03/20/23 13:34

Lab Sample ID: 890-4366-2

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			4.97 g	5 mL	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 03:06	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 13:16	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	49884	03/29/23 16:21	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	50034	03/30/23 22:58	SMC	EET MID

Client Sample ID: FS32

Date Collected: 03/20/23 10:25

Date Received: 03/20/23 13:34

Lab Sample ID: 890-4366-3

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			4.99 g	5 mL	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 03:27	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 13:37	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	49884	03/29/23 16:21	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	50034	03/30/23 23:03	SMC	EET MID

Client Sample ID: FS33

Date Collected: 03/20/23 10:30

Date Received: 03/20/23 13:34

Lab Sample ID: 890-4366-4

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	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 03:47	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: FS33

Lab Sample ID: 890-4366-4

Date Collected: 03/20/23 10:30

Matrix: Solid

Date Received: 03/20/23 13:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 13:58	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	49884	03/29/23 16:21	KS	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	50034	03/30/23 23:08	SMC	EET MID

Client Sample ID: FS34

Lab Sample ID: 890-4366-5

Date Collected: 03/20/23 10:35

Matrix: Solid

Date Received: 03/20/23 13:34

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	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 04:08	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 14:20	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	49884	03/29/23 16:21	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	50034	03/30/23 23:13	SMC	EET MID

Client Sample ID: SW14

Lab Sample ID: 890-4366-6

Date Collected: 03/20/23 10:40

Matrix: Solid

Date Received: 03/20/23 13:34

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	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 04:28	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 14:41	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	49884	03/29/23 16:21	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50034	03/30/23 23:27	SMC	EET MID

Client Sample ID: SW15

Lab Sample ID: 890-4366-7

Date Collected: 03/20/23 10:45

Matrix: Solid

Date Received: 03/20/23 13:34

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	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 04:48	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 15:03	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Client Sample ID: SW15**Lab Sample ID: 890-4366-7****Date Collected: 03/20/23 10:45****Matrix: Solid****Date Received: 03/20/23 13:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	49884	03/29/23 16:21	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50034	03/30/23 23:32	SMC	EET MID

Client Sample ID: SW16**Lab Sample ID: 890-4366-8****Date Collected: 03/20/23 10:50****Matrix: Solid****Date Received: 03/20/23 13:34**

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	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 05:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 15:24	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	49798	03/29/23 09:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49899	03/29/23 14:15	SMC	EET MID

Client Sample ID: SW17**Lab Sample ID: 890-4366-9****Date Collected: 03/20/23 10:55****Matrix: Solid****Date Received: 03/20/23 13:34**

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	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 05:29	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 16:07	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	49798	03/29/23 09:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49899	03/29/23 14:19	SMC	EET MID

Client Sample ID: SW18**Lab Sample ID: 890-4366-10****Date Collected: 03/20/23 11:00****Matrix: Solid****Date Received: 03/20/23 13:34**

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	49657	03/27/23 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49999	04/01/23 05:50	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50241	04/03/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			49673	03/27/23 17:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49457	03/24/23 16:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49559	03/27/23 16:29	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	49798	03/29/23 09:38	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49899	03/29/23 14:24	SMC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

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	T104704400-22-25	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: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: MCA 145-Maverick

Job ID: 890-4366-1
SDG: 03D2057027

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4366-1	FS30	Solid	03/20/23 10:15	03/20/23 13:34	4
890-4366-2	FS31	Solid	03/20/23 10:20	03/20/23 13:34	4
890-4366-3	FS32	Solid	03/20/23 10:25	03/20/23 13:34	4
890-4366-4	FS33	Solid	03/20/23 10:30	03/20/23 13:34	4
890-4366-5	FS34	Solid	03/20/23 10:35	03/20/23 13:34	4
890-4366-6	SW14	Solid	03/20/23 10:40	03/20/23 13:34	0 - 4
890-4366-7	SW15	Solid	03/20/23 10:45	03/20/23 13:34	0 - 4
890-4366-8	SW16	Solid	03/20/23 10:50	03/20/23 13:34	0 - 4
890-4366-9	SW17	Solid	03/20/23 10:55	03/20/23 13:34	0 - 4
890-4366-10	SW18	Solid	03/20/23 11:00	03/20/23 13:34	0 - 4

Eurofins Midland

1211 W Florida Ave
Midland TX 79701
Phone: 432-704-5440

Chain of Custody Record



Environment Testing

4/3/2023

Client Information (Sub Contract Lab)		Sampler		Lab PM Kramer, Jessica		Carrier Tracking No(s)		COC No 880-6566 1																																				
Client Contact: Shipping/Receiving		Phone		E-Mail Jessica.Kramer@et.eurofinsus.com		State of Origin New Mexico		Page Page 1 of 2																																				
Company Eurofins Environment Testing South Centr				Accreditations Required (See note): NELAP - Texas				Job #: 890-4366-1																																				
Address 1211 W Florida Ave		Due Date Requested 3/24/2023		Analysis Requested <table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td>Perform MS/MSD (Yes or No)</td><td>8016MOD_NM/8016NM_S_Prep (MOD) Full TPH</td><td>8016MOD_Calc</td><td>300_ORGFM_28DDI_LEACH Chloride</td><td>8021BI/6036FP_Calc (MOD) BTEX</td><td>Total_BTEX_GCV</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>				Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8016NM_S_Prep (MOD) Full TPH	8016MOD_Calc	300_ORGFM_28DDI_LEACH Chloride	8021BI/6036FP_Calc (MOD) BTEX	Total_BTEX_GCV																													Preservation Codes	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8016NM_S_Prep (MOD) Full TPH	8016MOD_Calc					300_ORGFM_28DDI_LEACH Chloride	8021BI/6036FP_Calc (MOD) BTEX	Total_BTEX_GCV																																		
City Midland		TAT Requested (days)		A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Amchlor H Ascorbic Acid I Ice J DI Water K EDTA L EDA		M Hexane N None O AsNaO2 P Na2O4S Q Na2SO3 R Na2S2O3 S H2SO4 T TSP Dodecahydrate U Acetone V MCAA W pH 4-5 Y Trizma Z other (specify)																																						
State Zip TX, 79701																																												
Phone 432-704-5440(Tel)		PO #																																										
Email		WO #																																										
Project Name MCA145 MAVERICK		Project # 89000094																																										
Site		SSOW#																																										
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8016NM_S_Prep (MOD) Full TPH	8016MOD_Calc	300_ORGFM_28DDI_LEACH Chloride	8021BI/6036FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of Containers	Special Instructions/Note:																														
FS30 (890-4366-1)		3/20/23	10 15 Mountain		Solid			X	X	X	X	X	1																															
FS31 (890-4366-2)		3/20/23	10 20 Mountain		Solid			X	X	X	X	X	1																															
FS32 (890-4366-3)		3/20/23	10 25 Mountain		Solid			X	X	X	X	X	1																															
FS33 (890-4366-4)		3/20/23	10 30 Mountain		Solid			X	X	X	X	X	1																															
FS34 (890-4366-5)		3/20/23	10 35 Mountain		Solid			X	X	X	X	X	1																															
SW14 (890-4366-6)		3/20/23	10 40 Mountain		Solid			X	X	X	X	X	1																															
SW15 (890-4366-7)		3/20/23	10 45 Mountain		Solid			X	X	X	X	X	1																															
SW16 (890-4366-8)		3/20/23	10 50 Mountain		Solid			X	X	X	X	X	1																															
SW17 (890-4366-9)		3/20/23	10 55 Mountain		Solid			X	X	X	X	X	1																															
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.																																												
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																																		
Unconfirmed										☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months																																		
Deliverable Requested I II III IV Other (specify)										Primary Deliverable Rank 2																																		
Empty Kit Relinquished by:										Special Instructions/QC Requirements																																		
Date										Time																																		
Relinquished by: <i>Cille</i>										Received by: <i>[Signature]</i>																																		
Date/Time:										Date/Time:																																		
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Company:										Company:																																		
Relinquished by:										Received by:																																		
Date/Time:										Date/Time:																																		
Company:										Company:																																		
Custody Seals Intact: ☐ Yes ☐ No										Cooler Temperature(s) °C and Other Remarks.																																		

Ver: 06/08/2021

Page 31 of 33

Released to Imaging: 7/14/2023 10:26:01 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4366-1

SDG Number: 03D2057027

Login Number: 4366

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: 890-4366-1

SDG Number: 03D2057027

Login Number: 4366

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 03/21/23 11:22 AM

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

April 10, 2023

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MCA 145

Enclosed are the results of analyses for samples received by the laboratory on 04/06/23 13:40.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	04/06/2023	Sampling Date:	04/06/2023
Reported:	04/10/2023	Sampling Type:	Soil
Project Name:	MCA 145	Sampling Condition:	Cool & Intact
Project Number:	03D2054025	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.805570,-103.748441		

Sample ID: FS 19 A @ 4.25' (H231620-01)

BTX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/06/2023	ND	2.19	109	2.00	5.91	
Toluene*	<0.050	0.050	04/06/2023	ND	2.22	111	2.00	5.05	
Ethylbenzene*	<0.050	0.050	04/06/2023	ND	2.17	108	2.00	6.54	
Total Xylenes*	<0.150	0.150	04/06/2023	ND	6.79	113	6.00	7.67	
Total BTX	<0.300	0.300	04/06/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2400	16.0	04/10/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2023	ND	190	95.1	200	1.43	
DRO >C10-C28*	<10.0	10.0	04/06/2023	ND	187	93.7	200	0.441	
EXT DRO >C28-C36	<10.0	10.0	04/06/2023	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	04/06/2023	Sampling Date:	04/06/2023
Reported:	04/10/2023	Sampling Type:	Soil
Project Name:	MCA 145	Sampling Condition:	Cool & Intact
Project Number:	03D2054025	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.805570,-103.748441		

Sample ID: FS 11 A @ 4.25' (H231620-02)

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/06/2023	ND	2.19	109	2.00	5.91	
Toluene*	<0.050	0.050	04/06/2023	ND	2.22	111	2.00	5.05	
Ethylbenzene*	<0.050	0.050	04/06/2023	ND	2.17	108	2.00	6.54	
Total Xylenes*	<0.150	0.150	04/06/2023	ND	6.79	113	6.00	7.67	
Total BTEx	<0.300	0.300	04/06/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1580	16.0	04/10/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2023	ND	190	95.1	200	1.43	
DRO >C10-C28*	<10.0	10.0	04/06/2023	ND	187	93.7	200	0.441	
EXT DRO >C28-C36	<10.0	10.0	04/06/2023	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	04/06/2023	Sampling Date:	04/06/2023
Reported:	04/10/2023	Sampling Type:	Soil
Project Name:	MCA 145	Sampling Condition:	Cool & Intact
Project Number:	03D2054025	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.805570,-103.748441		

Sample ID: FS 15 A @ 4.25' (H231620-03)

BTX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/06/2023	ND	2.19	109	2.00	5.91		
Toluene*	<0.050	0.050	04/06/2023	ND	2.22	111	2.00	5.05		
Ethylbenzene*	<0.050	0.050	04/06/2023	ND	2.17	108	2.00	6.54		
Total Xylenes*	<0.150	0.150	04/06/2023	ND	6.79	113	6.00	7.67		
Total BTX	<0.300	0.300	04/06/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1040	16.0	04/10/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/08/2023	ND	178	89.0	200	2.18	
DRO >C10-C28*	<10.0	10.0	04/08/2023	ND	175	87.6	200	0.505	
EXT DRO >C28-C36	<10.0	10.0	04/08/2023	ND					

Surrogate: 1-Chlorooctane 69.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 67.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	04/06/2023	Sampling Date:	04/06/2023
Reported:	04/10/2023	Sampling Type:	Soil
Project Name:	MCA 145	Sampling Condition:	Cool & Intact
Project Number:	03D2054025	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.805570,-103.748441		

Sample ID: FS 17 A @ 4.25' (H231620-04)

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/06/2023	ND	2.19	109	2.00	5.91		
Toluene*	<0.050	0.050	04/06/2023	ND	2.22	111	2.00	5.05		
Ethylbenzene*	<0.050	0.050	04/06/2023	ND	2.17	108	2.00	6.54		
Total Xylenes*	<0.150	0.150	04/06/2023	ND	6.79	113	6.00	7.67		
Total BTEx	<0.300	0.300	04/06/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3000	16.0	04/10/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/08/2023	ND	178	89.0	200	2.18	
DRO >C10-C28*	<10.0	10.0	04/08/2023	ND	175	87.6	200	0.505	
EXT DRO >C28-C36	<10.0	10.0	04/08/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	04/06/2023	Sampling Date:	04/06/2023
Reported:	04/10/2023	Sampling Type:	Soil
Project Name:	MCA 145	Sampling Condition:	Cool & Intact
Project Number:	03D2054025	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.805570,-103.748441		

Sample ID: FS 30 A @ 4.25' (H231620-05)

BTX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/06/2023	ND	2.19	109	2.00	5.91		
Toluene*	<0.050	0.050	04/06/2023	ND	2.22	111	2.00	5.05		
Ethylbenzene*	<0.050	0.050	04/06/2023	ND	2.17	108	2.00	6.54		
Total Xylenes*	<0.150	0.150	04/06/2023	ND	6.79	113	6.00	7.67		
Total BTX	<0.300	0.300	04/06/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2280	16.0	04/10/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/08/2023	ND	178	89.0	200	2.18	
DRO >C10-C28*	<10.0	10.0	04/08/2023	ND	175	87.6	200	0.505	
EXT DRO >C28-C36	<10.0	10.0	04/08/2023	ND					

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	04/06/2023	Sampling Date:	04/06/2023
Reported:	04/10/2023	Sampling Type:	Soil
Project Name:	MCA 145	Sampling Condition:	Cool & Intact
Project Number:	03D2054025	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.805570,-103.748441		

Sample ID: FS 32 A @ 4.25' (H231620-06)

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/06/2023	ND	1.97	98.4	2.00	1.04		
Toluene*	<0.050	0.050	04/06/2023	ND	1.99	99.4	2.00	2.40		
Ethylbenzene*	<0.050	0.050	04/06/2023	ND	1.99	99.4	2.00	1.71		
Total Xylenes*	<0.150	0.150	04/06/2023	ND	5.96	99.4	6.00	0.682		
Total BTEx	<0.300	0.300	04/06/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2400	16.0	04/10/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/08/2023	ND	178	89.0	200	2.18	
DRO >C10-C28*	<10.0	10.0	04/08/2023	ND	175	87.6	200	0.505	
EXT DRO >C28-C36	<10.0	10.0	04/08/2023	ND					

Surrogate: 1-Chlorooctane 99.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	04/06/2023	Sampling Date:	04/06/2023
Reported:	04/10/2023	Sampling Type:	Soil
Project Name:	MCA 145	Sampling Condition:	Cool & Intact
Project Number:	03D2054025	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.805570,-103.748441		

Sample ID: FS 33 A @ 4.25' (H231620-07)

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/06/2023	ND	1.97	98.4	2.00	1.04		
Toluene*	<0.050	0.050	04/06/2023	ND	1.99	99.4	2.00	2.40		
Ethylbenzene*	<0.050	0.050	04/06/2023	ND	1.99	99.4	2.00	1.71		
Total Xylenes*	<0.150	0.150	04/06/2023	ND	5.96	99.4	6.00	0.682		
Total BTEx	<0.300	0.300	04/06/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1410	16.0	04/10/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/08/2023	ND	178	89.0	200	2.18	
DRO >C10-C28*	<10.0	10.0	04/08/2023	ND	175	87.6	200	0.505	
EXT DRO >C28-C36	<10.0	10.0	04/08/2023	ND					

Surrogate: 1-Chlorooctane 98.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	04/06/2023	Sampling Date:	04/06/2023
Reported:	04/10/2023	Sampling Type:	Soil
Project Name:	MCA 145	Sampling Condition:	Cool & Intact
Project Number:	03D2054025	Sample Received By:	Tamara Oldaker
Project Location:	MAVERICK 32.805570,-103.748441		

Sample ID: FS 34 A @ 4.25' (H231620-08)

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/06/2023	ND	1.97	98.4	2.00	1.04	
Toluene*	<0.050	0.050	04/06/2023	ND	1.99	99.4	2.00	2.40	
Ethylbenzene*	<0.050	0.050	04/06/2023	ND	1.99	99.4	2.00	1.71	
Total Xylenes*	<0.150	0.150	04/06/2023	ND	5.96	99.4	6.00	0.682	
Total BTEx	<0.300	0.300	04/06/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4960	16.0	04/10/2023	ND	400	100	400	3.92	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/08/2023	ND	178	89.0	200	2.18	
DRO >C10-C28*	<10.0	10.0	04/08/2023	ND	175	87.6	200	0.505	
EXT DRO >C28-C36	<10.0	10.0	04/08/2023	ND					

Surrogate: 1-Chlorooctane 88.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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Relinquished By: <i>J. Falconata</i>		Date: <i>4/6/23</i>		Received By: <i>[Signature]</i>		Verbal Result: ☐ Yes ☐ No Add'l Phone #:	
Time: <i>13:40</i>		Time:		Received By:		All Results are emailed. Please provide Email address:	
Relinquished By:		Date:		Received By:		REMARKS: <i>jennings@ensolum.com jfalconata@ensolum.com</i>	
Time:		Time:		Time:		Time:	
Delivered By: (Circle One)		Observed Temp. °C <i>6.1</i>		Sample Condition		CHECKED BY: (Initials) <i>[Signature]</i>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C <i>5.5</i>		Cool Intact ☐ Yes ☒ No		Turnaround Time: Standard ☐ Rush ☒	
FORM-006 R 3.3 07/16/22						Thermometer ID #113 Correction Factor -0.6°C <i>24hr</i>	
						Bacteria (only) Sample Condition Cool Intact Observed Temp. °C ☐ Yes ☐ No ☐ Yes ☐ No Corrected Temp. °C	

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



APPENDIX C

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	nAPP2229469315
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Maverick Permian, LLC	OGRID: 331199
Contact Name: Bryce Wagoner	Contact Telephone: 928-241-1862
Contact email: Bryce.Wagoner@mavresources.com	Incident # (assigned by OCD) nAPP2229469315
Contact mailing address: 1410 NW County Road Hobbs, NM 88240	

Location of Release Source

Latitude 32.805570 Longitude -103.748544
(NAD 83 in decimal degrees to 5 decimal places)

Site Name MCA Unit #145	Site Type
Date Release Discovered October 14, 2022	API# (if applicable) 30-025-00714

Unit Letter	Section	Township	Range	County
H	27	17S	32E	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 (bbls) 39.16 bbls	Volume Recovered (bbls) 21.16 bbls
☒ Produced Water	Volume Released (bbls) 254.24 bbls	Volume Recovered (bbls) 238.84
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was caused by an injection line rupture due to corrosion. The release occurred off pad. The source of the release has been stopped and the impacted area has been secured. An evaluation will be conducted at the Site to determine if we may commence remediation immediately or delineate any possible impact from the release.

Incident ID	nAPP2229469315
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? Release volume greater than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given by Kalei Jennings with Ensolum on behalf of Maverick Permian via email on October 15, 2022 at 12:32 PM to ocd.enviro@emnrd.nm.gov and EMNRD-OCD-District1spills@emnrd.nm.gov	

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 <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Bryce Wagoner</u>	Title: <u>Permian HSE Specialist II</u>
Signature: 	Date: <u>10/21/2022</u>
email: <u>Bryce.Wagoner@mavresources.com</u>	Telephone: <u>928-241-1862</u>
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>10/24/2022</u>

Pooled Fluids										
	Length (ft.)	Width (ft.)	Depth (in)	# of Boundaries *edges of pool where depth is 0. don't count shared boundaries	Oil-Water Ratio (%)	Pooled Area (ft ²)	Estimated Average Depth (ft.)	Pooled Volume (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	10.0	10.0	36.0	4.0	0.80	100.0	0.8	13.4	10.68	2.67
Rectangle B	80.0	15.0	48.0	4.0	0.05	1200.0	1.0	213.6	10.68	202.92
Rectangle C	10.0	10.0	24.00	4.0	0.05	100.000	0.500	8.900	4.45	8.46
Rectangle D	20.0	15.0	24.00	4.0	0.10	300.000	0.500	26.700	13.35	24.03
Rectangle E							#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Volume (bbls):								262.55	39.16	238.08

Subsurface Fluids										
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) *10% in consolidated sediments after rain to 50% in sand with no precipitation	Oil-Water Ratio (%)	Area (ft ²)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	60.0	30.0	2.00	0.1	0.50	1800.0	53.4	2.7	1.34	1.3
Rectangle B	88.0	33.0	2.00	0.1	0.50	2904.0	86.2	4.3	2.15	2.2
Rectangle C	62.0	30.0	4.00	0.1	0.50	1860.0	110.4	5.5	2.76	2.8
Rectangle D	36.0	30.0	2.00	0.1	0.50	1080.0	32.0	1.6	0.80	0.8
Rectangle E	113.0	26.0	5.00	0.1	0.50	2938.0	217.9	10.9	5.45	5.4
Rectangle F	51.0	31.0	5.00	0.1	0.50	1581.0	117.3	5.9	2.93	2.9
Rectangle G						0.0	0.0	0.0	0.00	0.0
Rectangle H						0.0	0.0	0.0	0.00	0.0
Rectangle I						0.0	0.0	0.0	0.00	0.0
Rectangle J						0.0	0.0	0.0	0.00	0.0
Total Volume (bbls):								30.86	15.43	15.43

TOTAL RELEASE VOLUME (bbls):	293.4
------------------------------	-------

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 152709

CONDITIONS

Operator: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 152709
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	10/24/2022

Incident ID	NAPP2229469315
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>51-100</u> (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

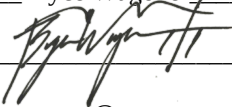
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NAPP2229469315
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 WagonerTitle: Permian HSE Specialist IISignature: Date: 4/14/2023email: bryce.wagoner@mavresources.comTelephone: 928-241-1862**OCD Only**Received by: Jocelyn HarimonDate: 04/21/2023

Incident ID	NAPP2229469315
District RP	
Facility ID	
Application ID	

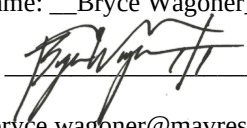
Closure

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

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Bryce Wagoner Title: Permian HSE Specialist II
Signature:  Date: 4/14/2023
email: bryce.wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Jocelyn Harimon Date: 04/21/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by:  Date: 07/14/2023
Printed Name: Nelson Velez Title: Environmental Specialist – Adv



APPENDIX D

NMOCD Notifications

From: OCDOnline@state.nm.us
To: [Kalei Jennings](#)
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 177225
Date: Thursday, February 9, 2023 10:49:36 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#) nAPP2229469315, with the following conditions:

- **Remediation Plan Approved with Conditions.** The depth to groundwater has not been adequately determined for the least stringent criteria (20,000 mg/kg chloride). When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. OCD will accept dtw 51-100' and 10,000 mg/kg chloride. Please ensure your remediation efforts reflect the accepted criteria. Composite confirmation samples will be collected from the bottom of the excavation from areas representing no more than four hundred (400) square feet. Composite confirmation samples will be collected from the sidewalls of the excavation from areas representing no more than two hundred (200) sq ft.

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@emnrd.nm.gov

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

From: [Enviro, OCD, EMNRD](#)
To: [Josh Adams](#)
Cc: [Bratcher, Michael, EMNRD](#); [Nobui, Jennifer, EMNRD](#)
Subject: RE: [EXTERNAL] Sampling Notifications - Week of 3/6/2023
Date: Wednesday, March 1, 2023 5:23:00 PM
Attachments: [image005.jpg](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)

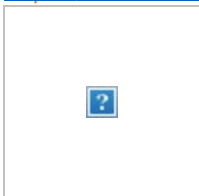
[**EXTERNAL EMAIL**]

Josh,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



From: Josh Adams <jadams@ensolum.com>
Sent: Wednesday, March 1, 2023 1:35 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Anna Byers <abyers@ensolum.com>; Joe Gable <jgable@ensolum.com>; Bryce Wagoner <Bryce.Wagoner@mavresources.com>
Subject: [EXTERNAL] Sampling Notifications - Week of 3/6/2023

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

All,

Maverick Natural Resources, LLC (Maverick) plans to complete final sampling activities at the following sites the week of March 6, 2023.

- MCA 145 / NAPP2229469315

- MCA 254/ NAPP2302035947
- Buckeye 43-01/ NAPP2230752440



Josh Adams, PG

Project Geologist

303-517-8437

Ensolum, LLC



PLEASE NOTE OUR NEW CORPORATE ADDRESS:

Ensolum, LLC

8330 LBJ Freeway, Ste. B830

Dallas, TX 75243

From: [Enviro, OCD, EMNRD](#)
To: [Kalei Jennings](#)
Cc: [Bratcher, Michael, EMNRD](#); [Nobui, Jennifer, EMNRD](#)
Subject: RE: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 3/13/2023)
Date: Friday, March 10, 2023 4:32:05 PM
Attachments: [image005.jpg](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)

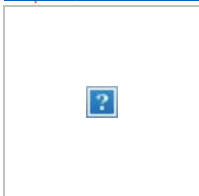
[**EXTERNAL EMAIL**]

Kalei,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



From: Kalei Jennings <kjennings@ensolum.com>
Sent: Thursday, March 9, 2023 2:33 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick Permian - Sampling Notification (Week of 3/13/2023)

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

All,

Maverick Natural Resources, LLC (Maverick) plans to complete final sampling activities at the following sites the week of March 13, 2023.

- EVGSAU 2801/ NAPP2221675703
- MCA 145 / NAPP2229469315

Thank you,



Kalei Jennings

Senior Scientist

817-683-2503

Ensolum, LLC



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 209756

CONDITIONS

Operator: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 209756
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	7/14/2023