



August 9, 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
State F TG 001
Incident Number NAPP2233947938
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Natural Resources, LLC (Maverick), has prepared the following *Closure Request* to document assessment, excavation, and soil sampling activities performed at the State F TG 001 release (Site). The purpose of the assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of crude oil at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, Maverick is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2233947938.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit F, Section 36, Township 17 South, Range 33 East, in Lea County, New Mexico (32.79316° N, -103.61882° W) and is associated with oil and gas exploration and production operations on State Land managed by New Mexico State Land Office (NMSLO).

On November 20, 2022, a pressure switch failed and resulted in the release of approximately 15 barrels (bbls) of crude oil onto the surface of the well pad and lease road. A vacuum truck was dispatched to the Site and recovered approximately 10 bbls of free-standing crude oil. Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on November 30, 2022. The release was assigned Incident Number NAPP2233947938.

Since the release remained on the active well pad and lease road, an assessment of cultural properties had already been completed prior to the construction of the well pad and as such, the Cultural Properties Protection Rule (CPP) has been followed. No additional cultural resource surveys were completed in connection with this release. The release area is not expected to be reclaimed until the oil and gas well is plugged and abandoned and the well pad is reclaimed. The Reclamation Plan for this release will default to the NMSLO-approved Reclamation Plan for the well pad per 19.2.100.67 of the New Mexico Administrative Code (NMAC).

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess applicability of Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the NMAC. Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 324815103372001, located approximately 4,726 feet northwest of the Site. The groundwater well has a reported depth to groundwater of 162 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well record is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a playa lake, located approximately 2,822 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

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

SITE ASSESSMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On January 12, 2023, Ensolum personnel were at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Maverick had completed a surface scrape of the release area during initial response activities. Ensolum collected eight assessment soil samples (SS01 through SS08) within and around the release extent at a depth of 0.25 feet bgs to assess the extent of the release. The soil samples were field screened for volatile aromatic hydrocarbons (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. The release extent and assessment soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

Based on elevated field screening results, assessment samples SS06, SS07, and SS08 weren't submitted for laboratory analysis, and excavation was warranted in these areas. Assessment soil samples SS01 through SS05 were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were



transported at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Eurofins or Cardinal Laboratories for analysis of the following constituents of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0 or 4500.

On January 23, 2023, Ensolum personnel returned to the Site to complete additional assessment activities. Four potholes (PH01 through PH04) were advanced within the release extent via backhoe to further assess the extent of the release. Soil from the potholes was field screened for VOCs and chloride. Discrete delineation soil samples were collected from each pothole at depths ranging from 0.5 feet to 2 feet bgs. The delineation samples were collected, handled, and analyzed as described above. The delineation soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 2. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix B.

Laboratory analytical results for assessment soil samples SS01 through SS05 and delineation samples from potholes PH01 through PH04 indicated that all COC concentrations were compliant with the most stringent Table I Closure Criteria and provided lateral and vertical definition of the release. Based on field screening results for assessment samples SS06 through SS08, excavation activities were warranted.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between January 12, 2023, and July 18, 2023, Ensolum personnel were at the Site to oversee excavation of impacted soil as indicated by field screening results for assessment samples SS06 through SS08. To direct excavation activities, soil was field screened for VOCs and chloride. Excavation activities were performed utilizing a backhoe and transport vehicles. The excavation was completed to depths ranging from 0.25 feet to 3 feet bgs.

Following removal of impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS12, FS01A, FS08A, FS09A, FS10A, and FS12A were collected from the floor of the excavation at depths ranging from 0.25 feet to 3 feet bgs. Composite soil samples SW01 through SW03 were collected from the sidewalls of the deeper portions of the excavation, at depths ranging from the ground surface to 3 feet bgs. Due to the shallow depth of the rest of the excavation areas, soil from any sidewalls was incorporated into the floor samples. The excavation soil samples were handled and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 3.

Laboratory analytical results for excavation soil samples FS01A, FS02 through FS07, FS08A, FS09A, FS10A, FS11, and FS12A, and SW01 through SW03, collected from the final excavation extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Laboratory analytical results for excavation floor samples FS01, FS08, FS09, FS10, and FS12 initially exceeded the most stringent Table I Closure Criteria for TPH or chloride; additional soil was removed from these areas and subsequent floor samples FS01A, FS08A, FS09A, FS10A, and FS12A were compliant. Laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix C.

The combined excavations measured approximately 2,300 square feet in areal extent. A total of approximately 175 cubic yards of impacted soil was removed during the excavation activities. The



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impacted soil was transported and properly disposed of at the R360 Disposal Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the January 23, 2023, release of crude oil. Laboratory analytical results for the excavation soil samples collected from the final excavation extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Additionally, the release was laterally and vertically delineated to below the most stringent Table I Closure Criteria. Based on the laboratory analytical results, no further remediation is required. Maverick backfilled the excavations with material purchased locally and recontoured the Site to match pre-existing conditions.

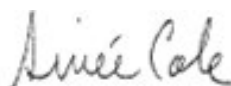
Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. Depth to groundwater was estimated to be greater than 100 feet bgs and no sensitive receptors were identified near the release extent. Maverick believes the remedial actions completed are protective of human health, the environment, and groundwater and respectfully requests closure for Incident NAPP2233947938. NMOCD Notifications are included in Appendix D and the final Form C-141 is included in Appendix E.

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

Sincerely,
Ensolum, LLC



Julianna Falcomata
Staff Geologist



Aimee Cole
Senior Managing Scientist

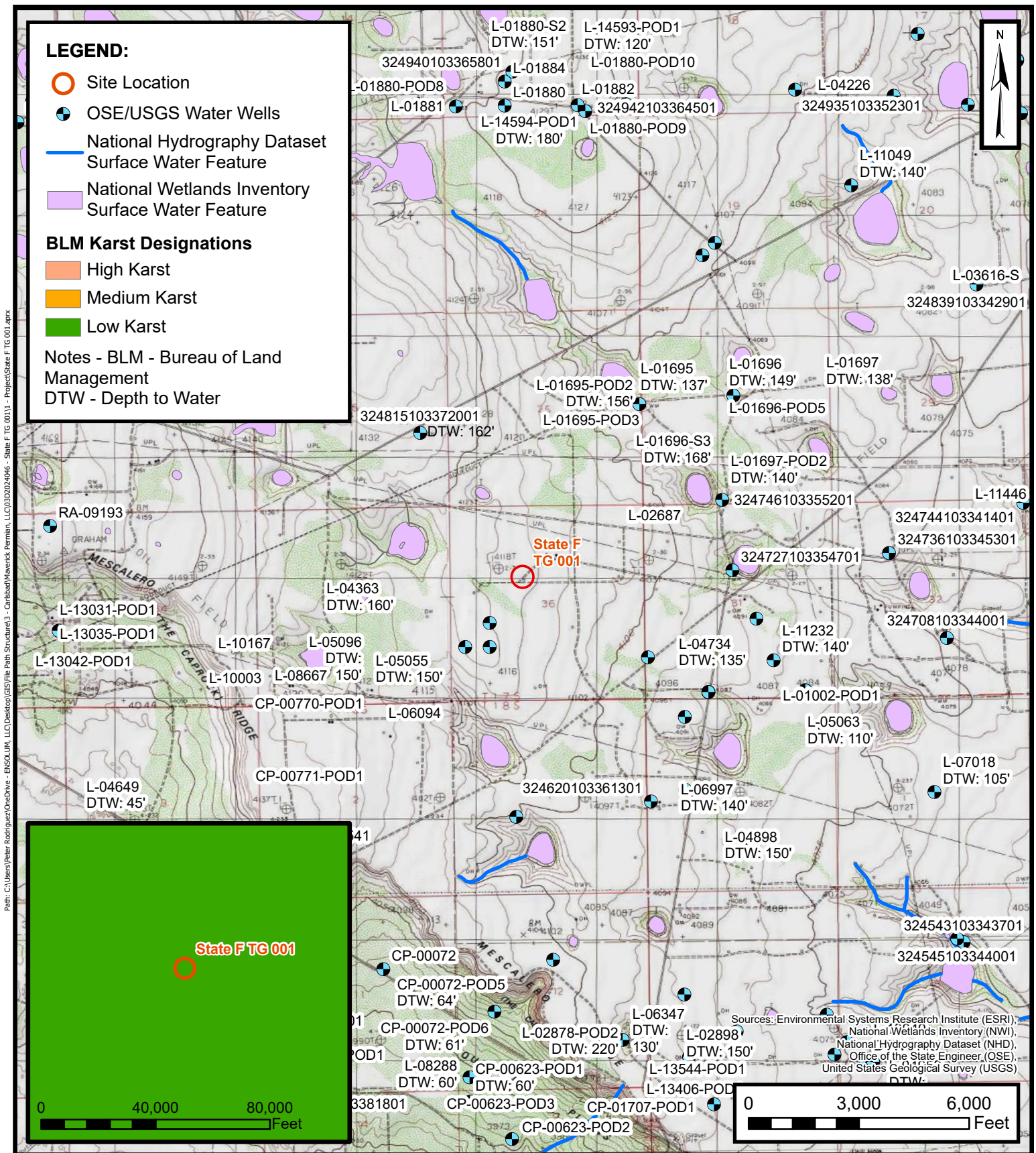
cc: Bryce Wagoner, Maverick Natural Resources
New Mexico State Land Office

Appendices:

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



FIGURES



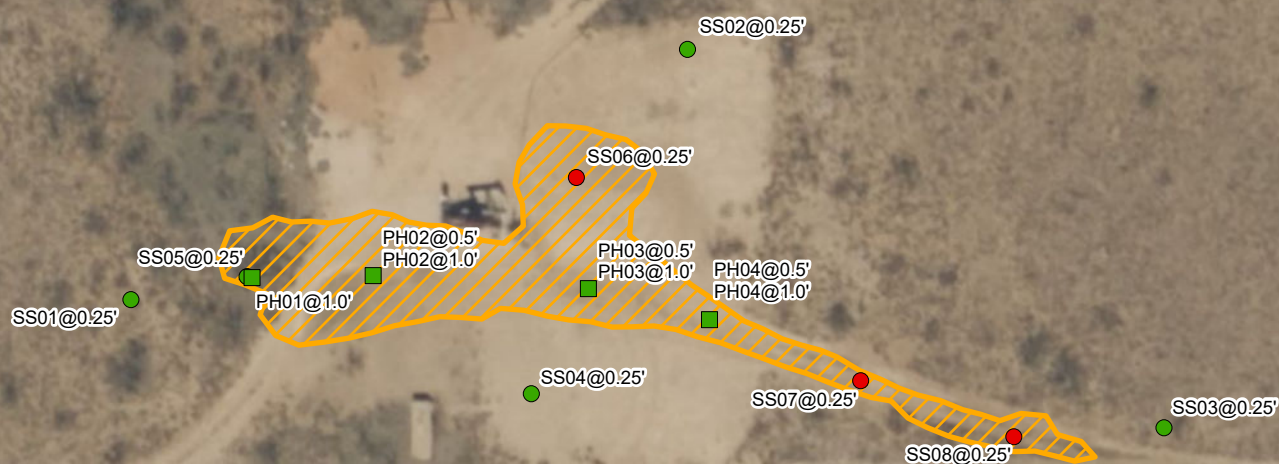
Site Receptor Map

State F TG 001
Maverick Permian, LLC
32.79316, -103.61882
Unit F Section 36, Township 17S, Range 33E,
Lea County, NM
Project Number: 03D2024046

FIGURE
1

Legend

- Assessment soil sample in compliance with applicable closure criteria
- Delineation soil sample in compliance with applicable closure criteria
- Assessment soil sample with concentrations exceeding closure criteria
- ▨ Release Extent



Notes:
Sample ID @ Depth Below Ground Surface.

0 25 50 100
Feet

Sources: Environmental Systems Research Institute (ESRI)



Assessment and Delineation Soil Sample Locations

Maverick Permian, LLC
State F TG 001
Incident Number: NAPP2233947938
Unit F, Sec 36, T17S, R 33E
Lea County, New Mexico

FIGURE
2

Legend

- Excavation Floor Sample in Compliance with Closure Criteria
- Excavation Sidewall Sample in Compliance with Closure Criteria
- ▨ Excavation Extent



Notes:
 Sample ID @ Depth Below Ground/Surface.
 Grey text indicates soil sample removed during excavation activities.

0 25 50
 Feet

Sources: Environmental Systems Research Institute (ESRI)



Excavation Soil Sample Locations

Maverick Permian, LLC
 State F TG 001
 Incident Number: NAPP2233947938
 Unit F, Sec 36, T17S, R 33E
 Lea County, New Mexico

FIGURE

3



TABLE



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
State F TG 001
Maverick Permian, LLC
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Assessment Soil Samples										
SS01	01/12/2023	0.25	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	<5.01
SS02	01/12/2023	0.25	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	105
SS03	01/12/2023	0.25	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	52.4
SS04	01/12/2023	0.25	<0.00199	<0.00398	<49.9	57.4	<49.9	57.4	57.4	5.65
SS05*	01/12/2023	0.25	<0.00200	<0.00399	<49.8	95.0	<49.8	95.0	95.0	50.0
SS06	01/12/2023	0.25	Field screening only							
SS07*	01/12/2023	0.25	Field screening only							
SS08*	01/12/2023	0.25	Field screening only							
Delineation Soil Samples										
PH01*	01/23/2023	1.0	<0.00199	0.0167	<50.0	<50.0	<50.0	<50.0	<50.0	5.89
PH02	01/23/2023	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	13.0
	01/23/2023	2.0	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	<5.02
PH03	01/23/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	36.2
	01/23/2023	1.0	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	37.5
PH04	01/23/2023	0.5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	5.39
	01/23/2023	1.0	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	128
Excavation Floor Soil Samples										
FS01	01/12/2023	1.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	1,560
FS01A	07/17/2023	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
FS02	01/12/2023	1.0	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	274
FS03	01/12/2023	1.5	<0.00199	<0.00398	78.6	<49.9	<49.9	79	78.6	128
FS04	01/12/2023	0.25	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	135
FS05	01/12/2023	0.25	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	412
FS06	01/12/2023	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	87.0
FS07	01/12/2023	1.0	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	73.6
FS08	01/12/2023	0.5	<0.00199	<0.00398	344	<50.0	65.8	344	410	93.4
FS08A	07/17/2023	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS09*	01/23/2023	1.0	<0.00199	<0.00398	<49.9	491	<49.9	491	491	59.9
FS09A *	07/18/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160.0
FS10*	01/23/2023	1.0	<0.00199	<0.00398	<49.9	107	<49.9	107	107	93.5
FS10A*	07/18/2023	3.0	<0.050	<0.300	<10.0	31.1	<10.0	31.1	31.1	96.0
FS11	01/12/2023	1.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	396
FS12*	01/23/2023	1.0	<0.00200	<0.00401	<50.0	358	<50.0	<50.0	358	60.9
FS12A*	07/18/2023	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS State F TG 001 Maverick Permian, LLC Lea County, New Mexico										
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Excavation Sidewall Soil Samples										
SW01	07/17/2023	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
SW02*	07/18/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SW03*	07/18/2023	0-3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0

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

TPH: Total Petroleum Hydrocarbon

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

Grey text indicates soil sample removed during excavation activities

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

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



APPENDIX A

Referenced Well Records

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measureme
								Groundwater	United States	GO

Click to hideNews Bulletins

- See the [Water Data for the Nation Blog](#) for the latest news and updates.

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 324815103372001

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 324815103372001 17S.33E.26.421443

Lea County, New Mexico
Latitude 32°48'14", Longitude 103°37'38" NAD27
Land-surface elevation 4,134.00 feet above NGVD29
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measureme
1950-05-18		D	62610	3973.27	NGVD29	1		Z		A
1950-05-18		D	62611	3974.91	NAVD88	1		Z		A
1950-05-18		D	72019	160.73		1		Z		A
1950-07-21		D	62610	3973.22	NGVD29	1		Z		A
1950-07-21		D	62611	3974.86	NAVD88	1		Z		A
1950-07-21		D	72019	160.78		1		Z		A
1950-09-21		D	62610	3973.18	NGVD29	1		Z		A
1950-09-21		D	62611	3974.82	NAVD88	1		Z		A
1950-09-21		D	72019	160.82		1		Z		A
1950-11-18		D	62610	3973.34	NGVD29	1		Z		A
1950-11-18		D	62611	3974.98	NAVD88	1		Z		A
1950-11-18		D	72019	160.66		1		Z		A
1951-01-21		D	62610	3973.44	NGVD29	1		Z		A
1951-01-21		D	62611	3975.08	NAVD88	1		Z		A
1951-01-21		D	72019	160.56		1		Z		A
1951-03-24		D	62610	3973.23	NGVD29	1		Z		A
1951-03-24		D	62611	3974.87	NAVD88	1		Z		A
1951-03-24		D	72019	160.77		1		Z		A
1951-05-22		D	62610	3973.14	NGVD29	1		Z		A
1951-05-22		D	62611	3974.78	NAVD88	1		Z		A
1951-05-22		D	72019	160.86		1		Z		A
1951-07-25		D	62610	3973.41	NGVD29	1		Z		A
1951-07-25		D	62611	3975.05	NAVD88	1		Z		A
1951-07-25		D	72019	160.59		1		Z		A
1951-09-21		D	62610	3973.13	NGVD29	1		Z		A
1951-09-21		D	62611	3974.77	NAVD88	1		Z		A
1951-09-21		D	72019	160.87		1		Z		A
1951-11-21		D	62610	3973.25	NGVD29	1		Z		A
1951-11-21		D	62611	3974.89	NAVD88	1		Z		A
1951-11-21		D	72019	160.75		1		Z		A

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measureme
1952-01-04		D	62610		3973.32	NGVD29	1	Z		A
1952-01-04		D	62611		3974.96	NAVD88	1	Z		A
1952-01-04		D	72019	160.68			1	Z		A
1952-03-22		D	62610		3973.13	NGVD29	1	Z		A
1952-03-22		D	62611		3974.77	NAVD88	1	Z		A
1952-03-22		D	72019	160.87			1	Z		A
1952-05-24		D	62610		3973.05	NGVD29	1	Z		A
1952-05-24		D	62611		3974.69	NAVD88	1	Z		A
1952-05-24		D	72019	160.95			1	Z		A
1952-07-23		D	62610		3973.02	NGVD29	1	Z		A
1952-07-23		D	62611		3974.66	NAVD88	1	Z		A
1952-07-23		D	72019	160.98			1	Z		A
1952-09-18		D	62610		3973.10	NGVD29	1	Z		A
1952-09-18		D	62611		3974.74	NAVD88	1	Z		A
1952-09-18		D	72019	160.90			1	Z		A
1952-11-18		D	62610		3972.97	NGVD29	1	Z		A
1952-11-18		D	62611		3974.61	NAVD88	1	Z		A
1952-11-18		D	72019	161.03			1	Z		A
1953-01-08		D	62610		3972.89	NGVD29	1	Z		A
1953-01-08		D	62611		3974.53	NAVD88	1	Z		A
1953-01-08		D	72019	161.11			1	Z		A
1953-03-24		D	62610		3972.85	NGVD29	1	Z		A
1953-03-24		D	62611		3974.49	NAVD88	1	Z		A
1953-03-24		D	72019	161.15			1	Z		A
1953-05-23		D	62610		3972.93	NGVD29	1	Z		A
1953-05-23		D	62611		3974.57	NAVD88	1	Z		A
1953-05-23		D	72019	161.07			1	Z		A
1953-07-22		D	62610		3972.79	NGVD29	1	Z		A
1953-07-22		D	62611		3974.43	NAVD88	1	Z		A
1953-07-22		D	72019	161.21			1	Z		A
1953-09-14		D	62610		3972.89	NGVD29	1	Z		A

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measureme
1953-09-14		D	62611		3974.53	NAVD88	1	Z		A
1953-09-14		D	72019	161.11			1	Z		A
1953-11-20		D	62610		3972.75	NGVD29	1	Z		A
1953-11-20		D	62611		3974.39	NAVD88	1	Z		A
1953-11-20		D	72019	161.25			1	Z		A
1954-01-11		D	62610		3972.70	NGVD29	1	Z		A
1954-01-11		D	62611		3974.34	NAVD88	1	Z		A
1954-01-11		D	72019	161.30			1	Z		A
1954-03-02		D	62610		3972.51	NGVD29	1	Z		A
1954-03-02		D	62611		3974.15	NAVD88	1	Z		A
1954-03-02		D	72019	161.49			1	Z		A
1954-05-05		D	62610		3972.68	NGVD29	1	Z		A
1954-05-05		D	62611		3974.32	NAVD88	1	Z		A
1954-05-05		D	72019	161.32			1	Z		A
1954-07-13		D	62610		3972.60	NGVD29	1	Z		A
1954-07-13		D	62611		3974.24	NAVD88	1	Z		A
1954-07-13		D	72019	161.40			1	Z		A
1954-09-15		D	62610		3972.46	NGVD29	1	Z		A
1954-09-15		D	62611		3974.10	NAVD88	1	Z		A
1954-09-15		D	72019	161.54			1	Z		A
1954-11-10		D	62610		3972.30	NGVD29	1	Z		A
1954-11-10		D	62611		3973.94	NAVD88	1	Z		A
1954-11-10		D	72019	161.70			1	Z		A
1955-01-06		D	62610		3972.19	NGVD29	1	Z		A
1955-01-06		D	62611		3973.83	NAVD88	1	Z		A
1955-01-06		D	72019	161.81			1	Z		A
1955-03-19		D	62610		3972.27	NGVD29	1	Z		A
1955-03-19		D	62611		3973.91	NAVD88	1	Z		A
1955-03-19		D	72019	161.73			1	Z		A
1955-05-28		D	62610		3972.07	NGVD29	1	Z		A
1955-05-28		D	62611		3973.71	NAVD88	1	Z		A

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measureme
1955-05-28		D	72019	161.93			1	Z		A
1955-07-15		D	62610		3972.12	NGVD29	1	Z		A
1955-07-15		D	62611		3973.76	NAVD88	1	Z		A
1955-07-15		D	72019	161.88			1	Z		A
1955-09-22		D	62610		3972.07	NGVD29	1	Z		A
1955-09-22		D	62611		3973.71	NAVD88	1	Z		A
1955-09-22		D	72019	161.93			1	Z		A
1955-11-28		D	62610		3971.95	NGVD29	1	Z		A
1955-11-28		D	62611		3973.59	NAVD88	1	Z		A
1955-11-28		D	72019	162.05			1	Z		A
1956-01-05		D	62610		3971.90	NGVD29	1	Z		A
1956-01-05		D	62611		3973.54	NAVD88	1	Z		A
1956-01-05		D	72019	162.10			1	Z		A
1956-03-14		D	62610		3971.91	NGVD29	1	Z		A
1956-03-14		D	62611		3973.55	NAVD88	1	Z		A
1956-03-14		D	72019	162.09			1	Z		A
1956-05-09		D	62610		3971.88	NGVD29	1	Z		A
1956-05-09		D	62611		3973.52	NAVD88	1	Z		A
1956-05-09		D	72019	162.12			1	Z		A
1956-07-26		D	62610		3971.76	NGVD29	1	Z		A
1956-07-26		D	62611		3973.40	NAVD88	1	Z		A
1956-07-26		D	72019	162.24			1	Z		A
1956-09-07		D	62610		3971.65	NGVD29	1	Z		A
1956-09-07		D	62611		3973.29	NAVD88	1	Z		A
1956-09-07		D	72019	162.35			1	Z		A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measureme
Referenced vertical datum				NGVD29	National Geodetic Vertical Datum of 1929					
Status				1	Static					
Method of measurement				Z	Other.					
Measuring agency					Not determined					
Source of measurement					Not determined					
Water-level approval status				A	Approved for publication -- Processing and review completed.					

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Page Last Modified: 2023-01-17 16:08:18 EST

0.3 0.26 nadww02



APPENDIX B

Photographic Log



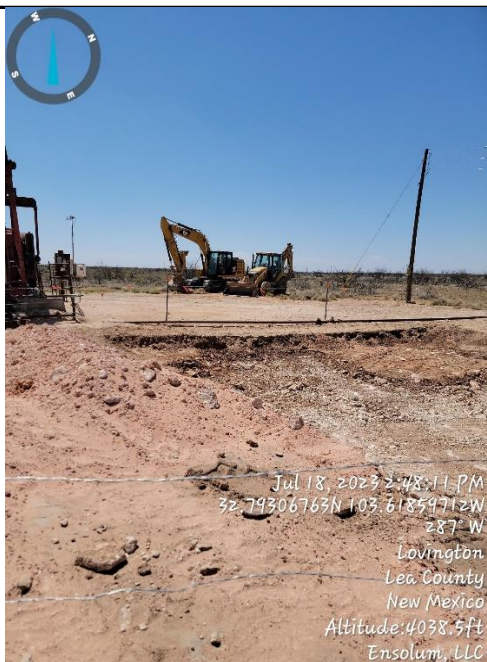
Photographic Log
 Maverick Permian, LLC
 State F TG #001
 NAPP2233947938



Photograph 1 Date: 1/12/2023
 Description: Stained soil from release
 View: North



Photograph 2 Date: 1/12/2023
 Description: Excavation activities
 View: Southeast



Photograph 3 Date: 7/17/2023
 Description: Completed excavation
 View: West



Photograph 4 Date: 7/17/2023
 Description: Completed excavation
 View: East



APPENDIX C

Laboratory Analytical Report



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/30/2023 9:42:58 AM

JOB DESCRIPTION

STATE FTG #001
SDG NUMBER 03D2057046

JOB NUMBER

890-3856-1

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
1/30/2023 9:42:58 AM

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

Client: Ensolum
Project/Site: STATE FTG #001

Laboratory Job ID: 890-3856-1
SDG: 03D2057046

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Definitions/Glossary

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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, high biased.
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.
*1	LCS/LCSD 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.

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: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Job ID: 890-3856-1

Laboratory: Eurofins Carlsbad

Narrative

**Job Narrative
890-3856-1**

Receipt

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

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-3856-1), FS02 (890-3856-2), FS03 (890-3856-3), FS04 (890-3856-4), FS05 (890-3856-5), FS06 (890-3856-6), FS07 (890-3856-7), FS08 (890-3856-8) and FS11 (890-3856-9).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS01 (890-3856-1), FS02 (890-3856-2), FS03 (890-3856-3), FS04 (890-3856-4), FS05 (890-3856-5), FS06 (890-3856-6), FS07 (890-3856-7), FS08 (890-3856-8), FS11 (890-3856-9), (LCS 880-44389/1-A) and (890-3856-A-1-E 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: The laboratory control sample (LCS) associated with preparation batch 880-44155 and analytical batch 880-44811 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.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS05 (890-3856-5), FS07 (890-3856-7), (LCS 880-44155/2-A), (LCSD 880-44155/3-A), (MB 880-44155/1-A) and (890-3858-A-1-B). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-24172-A-1-C), (880-24172-A-1-D MS) and (880-24172-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-44944 and analytical batch 880-44886 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-44196 and analytical batch 880-44283 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS01

Lab Sample ID: 890-3856-1

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 1.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201	mg/Kg		01/19/23 16:20	01/24/23 02:22	1
Toluene	<0.00201	U F2 F1	0.00201	mg/Kg		01/19/23 16:20	01/24/23 02:22	1
Ethylbenzene	<0.00201	U F1	0.00201	mg/Kg		01/19/23 16:20	01/24/23 02:22	1
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.00402	mg/Kg		01/19/23 16:20	01/24/23 02:22	1
o-Xylene	<0.00201	U F1	0.00201	mg/Kg		01/19/23 16:20	01/24/23 02:22	1
Xylenes, Total	<0.00402	U F1	0.00402	mg/Kg		01/19/23 16:20	01/24/23 02:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	01/19/23 16:20	01/24/23 02:22	1
1,4-Difluorobenzene (Surr)	78		70 - 130	01/19/23 16:20	01/24/23 02:22	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			01/24/23 13:50	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			01/27/23 11:58	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	<49.8	U	49.8	mg/Kg		01/17/23 13:29	01/27/23 03:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8	mg/Kg		01/17/23 13:29	01/27/23 03:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/17/23 13:29	01/27/23 03:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	01/17/23 13:29	01/27/23 03:16	1
o-Terphenyl	123		70 - 130	01/17/23 13:29	01/27/23 03:16	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1560		25.1	mg/Kg			01/19/23 02:53	5

Client Sample ID: FS02

Lab Sample ID: 890-3856-2

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 02:48	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 02:48	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 02:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/23 16:20	01/24/23 02:48	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 02:48	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/23 16:20	01/24/23 02:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	151	S1+	70 - 130	01/19/23 16:20	01/24/23 02:48	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS02

Lab Sample ID: 890-3856-2

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	86		70 - 130	01/19/23 16:20	01/24/23 02:48	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			01/24/23 13:50	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			01/27/23 11:58	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		01/17/23 13:29	01/27/23 03:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0	mg/Kg		01/17/23 13:29	01/27/23 03:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/17/23 13:29	01/27/23 03:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			01/17/23 13:29	01/27/23 03:38	1
o-Terphenyl	124		70 - 130			01/17/23 13:29	01/27/23 03:38	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	274		4.98	mg/Kg			01/19/23 02:59	1

Client Sample ID: FS03

Lab Sample ID: 890-3856-3

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 1.5

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		01/19/23 16:20	01/24/23 03:14	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 03:14	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 03:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/23 16:20	01/24/23 03:14	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 03:14	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/23 16:20	01/24/23 03:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130	01/19/23 16:20	01/24/23 03:14	1
1,4-Difluorobenzene (Surr)	82		70 - 130	01/19/23 16:20	01/24/23 03:14	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			01/24/23 13:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	78.6		49.9	mg/Kg			01/30/23 10:15	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS03

Lab Sample ID: 890-3856-3

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 1.5

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 *1	49.9	mg/Kg		01/17/23 16:20	01/28/23 04:47	1
Diesel Range Organics (Over C10-C28)	78.6		49.9	mg/Kg		01/17/23 16:20	01/28/23 04:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/17/23 16:20	01/28/23 04:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			01/17/23 16:20	01/28/23 04:47	1
o-Terphenyl	94		70 - 130			01/17/23 16:20	01/28/23 04:47	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	128		5.03	mg/Kg			01/18/23 20:56	1

Client Sample ID: FS04

Lab Sample ID: 890-3856-4

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 0.25

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		01/19/23 16:20	01/24/23 03:41	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/19/23 16:20	01/24/23 03:41	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/19/23 16:20	01/24/23 03:41	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		01/19/23 16:20	01/24/23 03:41	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/19/23 16:20	01/24/23 03:41	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		01/19/23 16:20	01/24/23 03:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130			01/19/23 16:20	01/24/23 03:41	1
1,4-Difluorobenzene (Surr)	82		70 - 130			01/19/23 16:20	01/24/23 03:41	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			01/24/23 13:50	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			01/27/23 11:58	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		01/17/23 13:29	01/27/23 04:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U **	49.9	mg/Kg		01/17/23 13:29	01/27/23 04:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/17/23 13:29	01/27/23 04:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130			01/17/23 13:29	01/27/23 04:20	1
o-Terphenyl	132	S1+	70 - 130			01/17/23 13:29	01/27/23 04:20	1

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Client Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS04

Lab Sample ID: 890-3856-4

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 0.25

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	135		5.00	mg/Kg			01/18/23 21:13	1

Client Sample ID: FS05

Lab Sample ID: 890-3856-5

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 0.25

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		01/19/23 16:20	01/24/23 04:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 04:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 04:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/19/23 16:20	01/24/23 04:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 04:07	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/19/23 16:20	01/24/23 04:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130			01/19/23 16:20	01/24/23 04:07	1
1,4-Difluorobenzene (Surr)	87		70 - 130			01/19/23 16:20	01/24/23 04:07	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			01/24/23 13:50	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			01/27/23 11:58	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		01/17/23 13:29	01/27/23 04:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		01/17/23 13:29	01/27/23 04:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/17/23 13:29	01/27/23 04:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130			01/17/23 13:29	01/27/23 04:42	1
o-Terphenyl	143	S1+	70 - 130			01/17/23 13:29	01/27/23 04:42	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	412		4.97	mg/Kg			01/18/23 21:19	1

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Client Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS06

Lab Sample ID: 890-3856-6

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 0.5

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		01/19/23 16:20	01/24/23 04:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 04:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 04:33	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/19/23 16:20	01/24/23 04:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 04:33	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/19/23 16:20	01/24/23 04:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130	01/19/23 16:20	01/24/23 04:33	1
1,4-Difluorobenzene (Surr)	77		70 - 130	01/19/23 16:20	01/24/23 04:33	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			01/24/23 13:50	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			01/30/23 10:15	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	<50.0	U *1	50.0	mg/Kg		01/17/23 16:20	01/28/23 05:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/17/23 16:20	01/28/23 05:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/17/23 16:20	01/28/23 05:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	01/17/23 16:20	01/28/23 05:08	1
o-Terphenyl	97		70 - 130	01/17/23 16:20	01/28/23 05:08	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.0		5.05	mg/Kg			01/18/23 21:25	1

Client Sample ID: FS07

Lab Sample ID: 890-3856-7

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 05:00	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 05:00	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 05:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/23 16:20	01/24/23 05:00	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 05:00	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/23 16:20	01/24/23 05:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130	01/19/23 16:20	01/24/23 05:00	1

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Client Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS07

Lab Sample ID: 890-3856-7

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	81		70 - 130	01/19/23 16:20	01/24/23 05:00	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			01/24/23 13:50	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			01/27/23 11:58	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		01/17/23 13:29	01/27/23 05:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		01/17/23 13:29	01/27/23 05:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/17/23 13:29	01/27/23 05:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			01/17/23 13:29	01/27/23 05:25	1
o-Terphenyl	132	S1+	70 - 130			01/17/23 13:29	01/27/23 05:25	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.6		4.99	mg/Kg			01/18/23 21:31	1

Client Sample ID: FS08

Lab Sample ID: 890-3856-8

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 0.5

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		01/19/23 16:20	01/24/23 05:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 05:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 05:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/23 16:20	01/24/23 05:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/23 16:20	01/24/23 05:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/23 16:20	01/24/23 05:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130	01/19/23 16:20	01/24/23 05:26	1
1,4-Difluorobenzene (Surr)	84		70 - 130	01/19/23 16:20	01/24/23 05:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			01/24/23 13:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	410		50.0	mg/Kg			01/30/23 10:15	1

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Client Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS08

Lab Sample ID: 890-3856-8

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 0.5

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 *1	50.0	mg/Kg		01/17/23 16:20	01/28/23 05:29	1
Diesel Range Organics (Over C10-C28)	344		50.0	mg/Kg		01/17/23 16:20	01/28/23 05:29	1
Oil Range Organics (Over C28-C36)	65.8		50.0	mg/Kg		01/17/23 16:20	01/28/23 05:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			01/17/23 16:20	01/28/23 05:29	1
o-Terphenyl	93		70 - 130			01/17/23 16:20	01/28/23 05:29	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.4		5.01	mg/Kg			01/18/23 21:48	1

Client Sample ID: FS11

Lab Sample ID: 890-3856-9

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Sample Depth: 1.5

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		01/19/23 16:20	01/24/23 05:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 05:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 05:52	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/19/23 16:20	01/24/23 05:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 05:52	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/19/23 16:20	01/24/23 05:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	153	S1+	70 - 130			01/19/23 16:20	01/24/23 05:52	1
1,4-Difluorobenzene (Surr)	90		70 - 130			01/19/23 16:20	01/24/23 05:52	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			01/24/23 13:50	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			01/30/23 10:15	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 *1	49.9	mg/Kg		01/17/23 16:20	01/28/23 05:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/17/23 16:20	01/28/23 05:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/17/23 16:20	01/28/23 05:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			01/17/23 16:20	01/28/23 05:49	1
o-Terphenyl	90		70 - 130			01/17/23 16:20	01/28/23 05:49	1

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Client Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS11
Date Collected: 01/12/23 00:00
Date Received: 01/13/23 14:13
Sample Depth: 1.5

Lab Sample ID: 890-3856-9
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	396		5.00	mg/Kg			01/18/23 21:54	1

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

Surrogate Summary

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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)
890-3856-1	FS01	131 S1+	78
890-3856-1 MS	FS01	113	83
890-3856-1 MSD	FS01	134 S1+	81
890-3856-2	FS02	151 S1+	86
890-3856-3	FS03	159 S1+	82
890-3856-4	FS04	130	82
890-3856-5	FS05	149 S1+	87
890-3856-6	FS06	132 S1+	77
890-3856-7	FS07	159 S1+	81
890-3856-8	FS08	139 S1+	84
890-3856-9	FS11	153 S1+	90
LCS 880-44389/1-A	Lab Control Sample	141 S1+	92
LCSD 880-44389/2-A	Lab Control Sample Dup	131 S1+	91
MB 880-44389/5-A	Method Blank	98	75
MB 880-44394/5-A	Method Blank	93	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-24172-A-1-D MS	Matrix Spike	75	64 S1-
880-24172-A-1-E MSD	Matrix Spike Duplicate	79	68 S1-
890-3856-1	FS01	106	123
890-3856-2	FS02	114	124
890-3856-3	FS03	96	94
890-3856-4	FS04	121	132 S1+
890-3856-5	FS05	128	143 S1+
890-3856-6	FS06	96	97
890-3856-7	FS07	122	132 S1+
890-3856-8	FS08	97	93
890-3856-9	FS11	90	90
890-3858-A-1-C MS	Matrix Spike	98	100
890-3858-A-1-D MSD	Matrix Spike Duplicate	101	101
LCS 880-44155/2-A	Lab Control Sample	128	141 S1+
LCS 880-44944/2-A	Lab Control Sample	92	94
LCSD 880-44155/3-A	Lab Control Sample Dup	119	132 S1+
LCSD 880-44944/3-A	Lab Control Sample Dup	87	89
MB 880-44155/1-A	Method Blank	132 S1+	159 S1+
MB 880-44944/1-A	Method Blank	116	117
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-44389/5-A

Matrix: Solid

Analysis Batch: 44514

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 44389

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 01:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 01:56	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 01:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/23 16:20	01/24/23 01:56	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:20	01/24/23 01:56	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/23 16:20	01/24/23 01:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	01/19/23 16:20	01/24/23 01:56	1
1,4-Difluorobenzene (Surr)	75		70 - 130	01/19/23 16:20	01/24/23 01:56	1

Lab Sample ID: LCS 880-44389/1-A

Matrix: Solid

Analysis Batch: 44514

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 44389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1154		mg/Kg		115	70 - 130
Toluene	0.100	0.08920		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.07834		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	0.200	0.1634		mg/Kg		82	70 - 130
o-Xylene	0.100	0.08474		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: LCSD 880-44389/2-A

Matrix: Solid

Analysis Batch: 44514

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 44389

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1216		mg/Kg		122	70 - 130	5	35
Toluene	0.100	0.1022		mg/Kg		102	70 - 130	14	35
Ethylbenzene	0.100	0.09859		mg/Kg		99	70 - 130	23	35
m-Xylene & p-Xylene	0.200	0.2131		mg/Kg		107	70 - 130	26	35
o-Xylene	0.100	0.1073		mg/Kg		107	70 - 130	23	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 890-3856-1 MS

Matrix: Solid

Analysis Batch: 44514

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 44389

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.100	0.06415	F1	mg/Kg		64	70 - 130
Toluene	<0.00201	U F2 F1	0.100	0.04187	F1	mg/Kg		42	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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

Lab Sample ID: 890-3856-1 MS

Matrix: Solid

Analysis Batch: 44514

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 44389

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.100	0.05385	F1	mg/Kg		54	70 - 130
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.200	0.05011	F1	mg/Kg		25	70 - 130
o-Xylene	<0.00201	U F1	0.100	0.06244	F1	mg/Kg		62	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

Lab Sample ID: 890-3856-1 MSD

Matrix: Solid

Analysis Batch: 44514

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 44389

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0990	0.06444	F1	mg/Kg		65	70 - 130	0	35
Toluene	<0.00201	U F2 F1	0.0990	0.06113	F2 F1	mg/Kg		62	70 - 130	37	35
Ethylbenzene	<0.00201	U F1	0.0990	0.06203	F1	mg/Kg		63	70 - 130	14	35
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.198	0.07636	F2 F1	mg/Kg		39	70 - 130	42	35
o-Xylene	<0.00201	U F1	0.0990	0.07037		mg/Kg		71	70 - 130	12	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130
1,4-Difluorobenzene (Surr)	81		70 - 130

Lab Sample ID: MB 880-44394/5-A

Matrix: Solid

Analysis Batch: 44514

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 44394

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:42	01/23/23 12:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:42	01/23/23 12:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:42	01/23/23 12:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/23 16:42	01/23/23 12:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/23 16:42	01/23/23 12:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/23 16:42	01/23/23 12:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	01/19/23 16:42	01/23/23 12:08	1
1,4-Difluorobenzene (Surr)	82		70 - 130	01/19/23 16:42	01/23/23 12:08	1

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

Lab Sample ID: MB 880-44155/1-A

Matrix: Solid

Analysis Batch: 44811

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 44155

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		01/17/23 13:29	01/26/23 21:34	1

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QC Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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

Lab Sample ID: MB 880-44155/1-A

Matrix: Solid

Analysis Batch: 44811

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 44155

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		01/17/23 13:29	01/26/23 21:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/17/23 13:29	01/26/23 21:34	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130			01/17/23 13:29	01/26/23 21:34	1
o-Terphenyl	159	S1+	70 - 130			01/17/23 13:29	01/26/23 21:34	1

Lab Sample ID: LCS 880-44155/2-A

Matrix: Solid

Analysis Batch: 44811

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 44155

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	970.6		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1391	*+	mg/Kg		139	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	128		70 - 130				
o-Terphenyl	141	S1+	70 - 130				

Lab Sample ID: LCSD 880-44155/3-A

Matrix: Solid

Analysis Batch: 44811

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 44155

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1059		mg/Kg		106	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1429	*+	mg/Kg		143	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	132	S1+	70 - 130						

Lab Sample ID: 890-3858-A-1-C MS

Matrix: Solid

Analysis Batch: 44811

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 44155

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	958.4		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *	998	1101		mg/Kg		108	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	100		70 - 130						

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QC Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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

Lab Sample ID: 890-3858-A-1-D MSD

Matrix: Solid

Analysis Batch: 44811

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 44155

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	997	984.9		mg/Kg		94	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U *	997	1128		mg/Kg		111	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	101		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: MB 880-44944/1-A

Matrix: Solid

Analysis Batch: 44886

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 44944

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/27/23 16:20	01/27/23 22:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/27/23 16:20	01/27/23 22:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/27/23 16:20	01/27/23 22:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			01/27/23 16:20	01/27/23 22:09	1
o-Terphenyl	117		70 - 130			01/27/23 16:20	01/27/23 22:09	1

Lab Sample ID: LCS 880-44944/2-A

Matrix: Solid

Analysis Batch: 44886

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 44944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	999	940.9		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	999	929.8		mg/Kg		93	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	94		70 - 130						

Lab Sample ID: LCSD 880-44944/3-A

Matrix: Solid

Analysis Batch: 44886

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 44944

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	999	747.1	*1	mg/Kg		75	70 - 130	23	20
Diesel Range Organics (Over C10-C28)	999	864.6		mg/Kg		87	70 - 130	7	20

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QC Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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

Lab Sample ID: LCSD 880-44944/3-A

Matrix: Solid

Analysis Batch: 44886

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 44944

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-24172-A-1-D MS

Matrix: Solid

Analysis Batch: 44886

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 44944

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	1000	856.2		mg/Kg		86	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1020		mg/Kg		99	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	64	S1-	70 - 130

Lab Sample ID: 880-24172-A-1-E MSD

Matrix: Solid

Analysis Batch: 44886

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 44944

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	998	909.1		mg/Kg		91	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1073		mg/Kg		105	70 - 130	5	20	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	68	S1-	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44197/1-A

Matrix: Solid

Analysis Batch: 44281

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<5.00	U	5.00	mg/Kg			01/18/23 20:38	1		

Lab Sample ID: LCS 880-44197/2-A

Matrix: Solid

Analysis Batch: 44281

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS						%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	253.9		mg/Kg		102	90 - 110			

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QC Sample Results

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-44197/3-A

Matrix: Solid

Analysis Batch: 44281

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	254.4		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-3856-3 MS

Matrix: Solid

Analysis Batch: 44281

Client Sample ID: FS03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	128		252	402.2		mg/Kg		109	90 - 110		

Lab Sample ID: 890-3856-3 MSD

Matrix: Solid

Analysis Batch: 44281

Client Sample ID: FS03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	128		252	403.0		mg/Kg		109	90 - 110	0	20

Lab Sample ID: MB 880-44196/1-A

Matrix: Solid

Analysis Batch: 44283

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			01/19/23 00:03	1

Lab Sample ID: LCS 880-44196/2-A

Matrix: Solid

Analysis Batch: 44283

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	256.3		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-44196/3-A

Matrix: Solid

Analysis Batch: 44283

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	257.2		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-3854-A-5-B MS

Matrix: Solid

Analysis Batch: 44283

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	503	F1	248	704.7	F1	mg/Kg		81	90 - 110		

Lab Sample ID: 890-3854-A-5-C MSD

Matrix: Solid

Analysis Batch: 44283

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	503	F1	248	584.5	F1	mg/Kg		33	90 - 110	19	20

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QC Association Summary

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

GC VOA

Prep Batch: 44389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-1	FS01	Total/NA	Solid	5035	
890-3856-2	FS02	Total/NA	Solid	5035	
890-3856-3	FS03	Total/NA	Solid	5035	
890-3856-4	FS04	Total/NA	Solid	5035	
890-3856-5	FS05	Total/NA	Solid	5035	
890-3856-6	FS06	Total/NA	Solid	5035	
890-3856-7	FS07	Total/NA	Solid	5035	
890-3856-8	FS08	Total/NA	Solid	5035	
890-3856-9	FS11	Total/NA	Solid	5035	
MB 880-44389/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-44389/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-44389/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3856-1 MS	FS01	Total/NA	Solid	5035	
890-3856-1 MSD	FS01	Total/NA	Solid	5035	

Prep Batch: 44394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-44394/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 44514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-1	FS01	Total/NA	Solid	8021B	44389
890-3856-2	FS02	Total/NA	Solid	8021B	44389
890-3856-3	FS03	Total/NA	Solid	8021B	44389
890-3856-4	FS04	Total/NA	Solid	8021B	44389
890-3856-5	FS05	Total/NA	Solid	8021B	44389
890-3856-6	FS06	Total/NA	Solid	8021B	44389
890-3856-7	FS07	Total/NA	Solid	8021B	44389
890-3856-8	FS08	Total/NA	Solid	8021B	44389
890-3856-9	FS11	Total/NA	Solid	8021B	44389
MB 880-44389/5-A	Method Blank	Total/NA	Solid	8021B	44389
MB 880-44394/5-A	Method Blank	Total/NA	Solid	8021B	44394
LCS 880-44389/1-A	Lab Control Sample	Total/NA	Solid	8021B	44389
LCSD 880-44389/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	44389
890-3856-1 MS	FS01	Total/NA	Solid	8021B	44389
890-3856-1 MSD	FS01	Total/NA	Solid	8021B	44389

Analysis Batch: 44641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-1	FS01	Total/NA	Solid	Total BTEX	
890-3856-2	FS02	Total/NA	Solid	Total BTEX	
890-3856-3	FS03	Total/NA	Solid	Total BTEX	
890-3856-4	FS04	Total/NA	Solid	Total BTEX	
890-3856-5	FS05	Total/NA	Solid	Total BTEX	
890-3856-6	FS06	Total/NA	Solid	Total BTEX	
890-3856-7	FS07	Total/NA	Solid	Total BTEX	
890-3856-8	FS08	Total/NA	Solid	Total BTEX	
890-3856-9	FS11	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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Prep Batch: 44155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-1	FS01	Total/NA	Solid	8015NM Prep	
890-3856-2	FS02	Total/NA	Solid	8015NM Prep	
890-3856-4	FS04	Total/NA	Solid	8015NM Prep	
890-3856-5	FS05	Total/NA	Solid	8015NM Prep	
890-3856-7	FS07	Total/NA	Solid	8015NM Prep	
MB 880-44155/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-44155/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-44155/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3858-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3858-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 44811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-1	FS01	Total/NA	Solid	8015B NM	44155
890-3856-2	FS02	Total/NA	Solid	8015B NM	44155
890-3856-4	FS04	Total/NA	Solid	8015B NM	44155
890-3856-5	FS05	Total/NA	Solid	8015B NM	44155
890-3856-7	FS07	Total/NA	Solid	8015B NM	44155
MB 880-44155/1-A	Method Blank	Total/NA	Solid	8015B NM	44155
LCS 880-44155/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	44155
LCSD 880-44155/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	44155
890-3858-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	44155
890-3858-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	44155

Analysis Batch: 44886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-3	FS03	Total/NA	Solid	8015B NM	44944
890-3856-6	FS06	Total/NA	Solid	8015B NM	44944
890-3856-8	FS08	Total/NA	Solid	8015B NM	44944
890-3856-9	FS11	Total/NA	Solid	8015B NM	44944
MB 880-44944/1-A	Method Blank	Total/NA	Solid	8015B NM	44944
LCS 880-44944/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	44944
LCSD 880-44944/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	44944
880-24172-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	44944
880-24172-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	44944

Analysis Batch: 44910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-1	FS01	Total/NA	Solid	8015 NM	
890-3856-2	FS02	Total/NA	Solid	8015 NM	
890-3856-3	FS03	Total/NA	Solid	8015 NM	
890-3856-4	FS04	Total/NA	Solid	8015 NM	
890-3856-5	FS05	Total/NA	Solid	8015 NM	
890-3856-6	FS06	Total/NA	Solid	8015 NM	
890-3856-7	FS07	Total/NA	Solid	8015 NM	
890-3856-8	FS08	Total/NA	Solid	8015 NM	
890-3856-9	FS11	Total/NA	Solid	8015 NM	

Prep Batch: 44944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-3	FS03	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

GC Semi VOA (Continued)

Prep Batch: 44944 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-6	FS06	Total/NA	Solid	8015NM Prep	
890-3856-8	FS08	Total/NA	Solid	8015NM Prep	
890-3856-9	FS11	Total/NA	Solid	8015NM Prep	
MB 880-44944/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-44944/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-44944/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-24172-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-24172-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 44196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-1	FS01	Soluble	Solid	DI Leach	
890-3856-2	FS02	Soluble	Solid	DI Leach	
MB 880-44196/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44196/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44196/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3854-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3854-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 44197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-3	FS03	Soluble	Solid	DI Leach	
890-3856-4	FS04	Soluble	Solid	DI Leach	
890-3856-5	FS05	Soluble	Solid	DI Leach	
890-3856-6	FS06	Soluble	Solid	DI Leach	
890-3856-7	FS07	Soluble	Solid	DI Leach	
890-3856-8	FS08	Soluble	Solid	DI Leach	
890-3856-9	FS11	Soluble	Solid	DI Leach	
MB 880-44197/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44197/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44197/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3856-3 MS	FS03	Soluble	Solid	DI Leach	
890-3856-3 MSD	FS03	Soluble	Solid	DI Leach	

Analysis Batch: 44281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-3	FS03	Soluble	Solid	300.0	44197
890-3856-4	FS04	Soluble	Solid	300.0	44197
890-3856-5	FS05	Soluble	Solid	300.0	44197
890-3856-6	FS06	Soluble	Solid	300.0	44197
890-3856-7	FS07	Soluble	Solid	300.0	44197
890-3856-8	FS08	Soluble	Solid	300.0	44197
890-3856-9	FS11	Soluble	Solid	300.0	44197
MB 880-44197/1-A	Method Blank	Soluble	Solid	300.0	44197
LCS 880-44197/2-A	Lab Control Sample	Soluble	Solid	300.0	44197
LCSD 880-44197/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44197
890-3856-3 MS	FS03	Soluble	Solid	300.0	44197
890-3856-3 MSD	FS03	Soluble	Solid	300.0	44197

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

HPLC/IC

Analysis Batch: 44283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3856-1	FS01	Soluble	Solid	300.0	44196
890-3856-2	FS02	Soluble	Solid	300.0	44196
MB 880-44196/1-A	Method Blank	Soluble	Solid	300.0	44196
LCS 880-44196/2-A	Lab Control Sample	Soluble	Solid	300.0	44196
LCSD 880-44196/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44196
890-3854-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	44196
890-3854-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44196

Lab Chronicle

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS01

Lab Sample ID: 890-3856-1

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 02:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44910	01/27/23 11:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	44155	01/17/23 13:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44811	01/27/23 03:16	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	44196	01/17/23 16:42	KS	EET MID
Soluble	Analysis	300.0		5			44283	01/19/23 02:53	CH	EET MID

Client Sample ID: FS02

Lab Sample ID: 890-3856-2

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 02:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44910	01/27/23 11:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	44155	01/17/23 13:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44811	01/27/23 03:38	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	44196	01/17/23 16:42	KS	EET MID
Soluble	Analysis	300.0		1			44283	01/19/23 02:59	CH	EET MID

Client Sample ID: FS03

Lab Sample ID: 890-3856-3

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 03:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44910	01/30/23 10:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	44944	01/17/23 16:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44886	01/28/23 04:47	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 20:56	CH	EET MID

Client Sample ID: FS04

Lab Sample ID: 890-3856-4

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 03:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS04

Lab Sample ID: 890-3856-4

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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			44910	01/27/23 11:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44155	01/17/23 13:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44811	01/27/23 04:20	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 21:13	CH	EET MID

Client Sample ID: FS05

Lab Sample ID: 890-3856-5

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 04:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44910	01/27/23 11:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	44155	01/17/23 13:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44811	01/27/23 04:42	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 21:19	CH	EET MID

Client Sample ID: FS06

Lab Sample ID: 890-3856-6

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 04:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44910	01/30/23 10:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	44944	01/17/23 16:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44886	01/28/23 05:08	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 21:25	CH	EET MID

Client Sample ID: FS07

Lab Sample ID: 890-3856-7

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 05:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44910	01/27/23 11:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44155	01/17/23 13:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44811	01/27/23 05:25	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Client Sample ID: FS07

Lab Sample ID: 890-3856-7

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 21:31	CH	EET MID

Client Sample ID: FS08

Lab Sample ID: 890-3856-8

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 05:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44910	01/30/23 10:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	44944	01/17/23 16:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44886	01/28/23 05:29	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 21:48	CH	EET MID

Client Sample ID: FS11

Lab Sample ID: 890-3856-9

Date Collected: 01/12/23 00:00

Matrix: Solid

Date Received: 01/13/23 14:13

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	44389	01/19/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44514	01/24/23 05:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44641	01/24/23 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44910	01/30/23 10:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	44944	01/17/23 16:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44886	01/28/23 05:49	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 21:54	CH	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: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: STATE FTG #001

Job ID: 890-3856-1
SDG: 03D2057046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3856-1	FS01	Solid	01/12/23 00:00	01/13/23 14:13	1.5
890-3856-2	FS02	Solid	01/12/23 00:00	01/13/23 14:13	1
890-3856-3	FS03	Solid	01/12/23 00:00	01/13/23 14:13	1.5
890-3856-4	FS04	Solid	01/12/23 00:00	01/13/23 14:13	0.25
890-3856-5	FS05	Solid	01/12/23 00:00	01/13/23 14:13	0.25
890-3856-6	FS06	Solid	01/12/23 00:00	01/13/23 14:13	0.5
890-3856-7	FS07	Solid	01/12/23 00:00	01/13/23 14:13	1
890-3856-8	FS08	Solid	01/12/23 00:00	01/13/23 14:13	0.5
890-3856-9	FS11	Solid	01/12/23 00:00	01/13/23 14:13	1.5

Client Information (Sub Contract Lab)						Sampler			Lab PM Kramer, Jessica							Carrier Tracking No(s)			COC No: 890-1102 1																			
Client Contact Shipping/Receiving						Phone:			E-Mail Jessica.Kramer@et.eurofinsus.com							State of Origin New Mexico			Page Page 1 of 1																			
Company Eurofins Environment Testing South Centr						Accreditations Required (See note) NELAP - Texas							Job # 890-3856-1																									
Address 1211 W Florida Ave ,						Due Date Requested 1/19/2023			Analysis Requested										Preservation Codes. A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Y Trizma Z other (specify) Other:																			
City: Midland						TAT Requested (days)																																
State, Zip TX, 79701																																						
Phone 432-704-5440(Tel)						PO #																																
Email						WO #																																
Project Name STATE FTG #001						Project # 89000102																																
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)		8015MOD_NM/8015NM_S_Prep (MOD) Full TPH		8015MOD_Calc		300_ORCFM_28D/DI_LEACH Chloride		8021B/5035FP_Calc (MOD) BTEX		Total_BTEX_GCV		Total Number of Containers		Special Instructions/Note								
										Preservation Code																												
FS01 (890-3856-1)						1/12/23		Mountain				Solid						X		X		X		X		X				1								
FS02 (890-3856-2)						1/12/23		Mountain				Solid						X		X		X		X		X				1								
FS03 (890-3856-3)						1/12/23		Mountain				Solid						X		X		X		X		X				1								
FS04 (890-3856-4)						1/12/23		Mountain				Solid						X		X		X		X		X				1								
FS05 (890-3856-5)						1/12/23		Mountain				Solid						X		X		X		X		X				1								
FS06 (890-3856-6)						1/12/23		Mountain				Solid						X		X		X		X		X				1								
FS07 (890-3856-7)						1/12/23		Mountain				Solid						X		X		X		X		X				1								
FS08 (890-3856-8)						1/12/23		Mountain				Solid						X		X		X		X		X				1								
FS11 (890-3856-9)						1/12/23		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															<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																							
Deliverable Requested I, II III IV Other (specify)										Primary Deliverable Rank 2					Special Instructions/QC Requirements																							
Empty Kit Relinquished by										Date					Time					Method of Shipment																		
Relinquished by										Date/Time:					Company					Received by					Date/Time:					Company								
Relinquished by										Date/Time					Company					Received by					Date/Time					Company								
Relinquished by										Date/Time					Company					Received by					Date/Time					Company								
Custody Seals Intact.										Custody Seal No										Cooler Temperature(s) °C and Other Remarks.																		
Δ Yes Δ No																																						

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3856-1

SDG Number: 03D2057046

Login Number: 3856

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: 890-3856-1

SDG Number: 03D2057046

Login Number: 3856

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 01/17/23 11:09 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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 2/5/2023 9:35:06 AM

JOB DESCRIPTION

State FTG #001
SDG NUMBER 03D2057046

JOB NUMBER

890-3946-1

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
2/5/2023 9:35:06 AM

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

Client: Ensolum
Project/Site: State FTG #001

Laboratory Job ID: 890-3946-1
SDG: 03D2057046

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Definitions/Glossary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

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
F2	MS/MSD RPD exceeds control limits
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: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

Job ID: 890-3946-1

Laboratory: Eurofins Carlsbad

Narrative	
	Job Narrative 890-3946-1

Receipt

The samples were received on 1/24/2023 8:44 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 4.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS10 (890-3946-1), FS11 (890-3946-2) and FS12 (890-3946-3).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-45339 and analytical batch 880-45309 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3944-A-1-G). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-45337 and analytical batch 880-45443 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

HPLC/IC

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

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Client Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

Client Sample ID: FS10

Lab Sample ID: 890-3946-1

Date Collected: 01/23/23 13:30

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 15:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 15:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 15:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/03/23 09:50	02/03/23 15:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 15:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/03/23 09:50	02/03/23 15:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	02/03/23 09:50	02/03/23 15:50	1
1,4-Difluorobenzene (Surr)	97		70 - 130	02/03/23 09:50	02/03/23 15:50	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			02/04/23 10:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	107		49.9	mg/Kg			02/05/23 09:31	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		02/03/23 09:23	02/04/23 18:48	1
Diesel Range Organics (Over C10-C28)	107		49.9	mg/Kg		02/03/23 09:23	02/04/23 18:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:23	02/04/23 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	02/03/23 09:23	02/04/23 18:48	1
o-Terphenyl	90		70 - 130	02/03/23 09:23	02/04/23 18:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.5		4.97	mg/Kg			01/30/23 10:55	1

Client Sample ID: FS11

Lab Sample ID: 890-3946-2

Date Collected: 01/23/23 13:35

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 17:12	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 17:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 17:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/03/23 09:50	02/03/23 17:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 17:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/03/23 09:50	02/03/23 17:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	02/03/23 09:50	02/03/23 17:12	1

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Client Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

Client Sample ID: FS11

Lab Sample ID: 890-3946-2

Date Collected: 01/23/23 13:35

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97		70 - 130	02/03/23 09:50	02/03/23 17:12	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			02/04/23 10:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	491		49.9	mg/Kg			02/05/23 09:31	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		02/03/23 09:23	02/04/23 19:10	1
Diesel Range Organics (Over C10-C28)	491		49.9	mg/Kg		02/03/23 09:23	02/04/23 19:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:23	02/04/23 19:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130			02/03/23 09:23	02/04/23 19:10	1
o-Terphenyl	80		70 - 130			02/03/23 09:23	02/04/23 19:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.9		4.95	mg/Kg			01/30/23 11:01	1

Client Sample ID: FS12

Lab Sample ID: 890-3946-3

Date Collected: 01/23/23 13:40

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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		02/03/23 09:50	02/03/23 17:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 17:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 17:33	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		02/03/23 09:50	02/03/23 17:33	1
o-Xylene	0.00321		0.00200	mg/Kg		02/03/23 09:50	02/03/23 17:33	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		02/03/23 09:50	02/03/23 17:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	02/03/23 09:50	02/03/23 17:33	1
1,4-Difluorobenzene (Surr)	83		70 - 130	02/03/23 09:50	02/03/23 17:33	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			02/04/23 10:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	358		50.0	mg/Kg			02/05/23 09:31	1

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Client Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

Client Sample ID: FS12

Lab Sample ID: 890-3946-3

Date Collected: 01/23/23 13:40

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 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		02/03/23 09:23	02/04/23 19:31	1
Diesel Range Organics (Over C10-C28)	358		50.0	mg/Kg		02/03/23 09:23	02/04/23 19:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/03/23 09:23	02/04/23 19:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130			02/03/23 09:23	02/04/23 19:31	1
o-Terphenyl	81		70 - 130			02/03/23 09:23	02/04/23 19:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.9		5.05	mg/Kg			01/30/23 11:20	1

Surrogate Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

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)
890-3944-A-1-E MS	Matrix Spike	64 S1-	88
890-3944-A-1-F MSD	Matrix Spike Duplicate	119	100
890-3946-1	FS10	90	97
890-3946-2	FS11	92	97
890-3946-3	FS12	87	83
LCS 880-45339/1-A	Lab Control Sample	98	95
LCSD 880-45339/2-A	Lab Control Sample Dup	104	95
MB 880-45339/5-A	Method Blank	75	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 (70-130)	OTPH1 (70-130)
890-3923-A-3-E MS	Matrix Spike	107	86
890-3923-A-3-F MSD	Matrix Spike Duplicate	123	98
890-3946-1	FS10	96	90
890-3946-2	FS11	82	80
890-3946-3	FS12	85	81
LCS 880-45337/2-A	Lab Control Sample	107	92
LCSD 880-45337/3-A	Lab Control Sample Dup	125	107
MB 880-45337/1-A	Method Blank	112	110
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-45339/5-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45339

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/23 09:50	02/03/23 12:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	02/03/23 09:50	02/03/23 12:24	1
1,4-Difluorobenzene (Surr)	93		70 - 130	02/03/23 09:50	02/03/23 12:24	1

Lab Sample ID: LCS 880-45339/1-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1035		mg/Kg		103	70 - 130
Toluene	0.100	0.09635		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09708		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2017		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1095		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-45339/2-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1043		mg/Kg		104	70 - 130	1	35
Toluene	0.100	0.09819		mg/Kg		98	70 - 130	2	35
Ethylbenzene	0.100	0.09855		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2080		mg/Kg		104	70 - 130	3	35
o-Xylene	0.100	0.1070		mg/Kg		107	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-3944-A-1-E MS

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.06961		mg/Kg		70	70 - 130
Toluene	<0.00200	U	0.0996	0.08014		mg/Kg		80	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

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

Lab Sample ID: 890-3944-A-1-E MS

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.07706		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.199	0.1174	F1	mg/Kg		59	70 - 130
o-Xylene	<0.00200	U F1 F2	0.0996	0.05641	F1	mg/Kg		56	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 890-3944-A-1-F MSD

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 45339

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	0.09353		mg/Kg		93	70 - 130	29	35
Toluene	<0.00200	U	0.100	0.09465		mg/Kg		94	70 - 130	17	35
Ethylbenzene	<0.00200	U	0.100	0.1052		mg/Kg		105	70 - 130	31	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.2304	F2	mg/Kg		115	70 - 130	65	35
o-Xylene	<0.00200	U F1 F2	0.100	0.1150	F2	mg/Kg		114	70 - 130	68	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-45337/1-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45337

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/03/23 09:23	02/04/23 08:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:23	02/04/23 08:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:23	02/04/23 08:56	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	02/03/23 09:23	02/04/23 08:56	1
o-Terphenyl	110		70 - 130	02/03/23 09:23	02/04/23 08:56	1

Lab Sample ID: LCS 880-45337/2-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	999	903.4		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	999	878.2		mg/Kg		88	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

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

Lab Sample ID: LCS 880-45337/2-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45337

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: LCSD 880-45337/3-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45337

	Spike	LCSD	LCSD						%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit			
Gasoline Range Organics (GRO)-C6-C10	999	910.9		mg/Kg		91	70 - 130	1	20			
Diesel Range Organics (Over C10-C28)	999	1007		mg/Kg		101	70 - 130	14	20			

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	125		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-3923-A-3-E MS

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45337

	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	1000	862.5		mg/Kg		84	70 - 130			
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	883.8		mg/Kg		87	70 - 130			

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 890-3923-A-3-F MSD

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 45337

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	998	1297	F2	mg/Kg		127	70 - 130	40	20	
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1003		mg/Kg		99	70 - 130	13	20	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	98		70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44970/1-A

Matrix: Solid

Analysis Batch: 45040

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			01/30/23 09:16	1

Lab Sample ID: LCS 880-44970/2-A

Matrix: Solid

Analysis Batch: 45040

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.2		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-44970/3-A

Matrix: Solid

Analysis Batch: 45040

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	253.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-3946-2 MS

Matrix: Solid

Analysis Batch: 45040

Client Sample ID: FS11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	59.9		248	291.0		mg/Kg		93	90 - 110

Lab Sample ID: 890-3946-2 MSD

Matrix: Solid

Analysis Batch: 45040

Client Sample ID: FS11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	59.9		248	291.2		mg/Kg		93	90 - 110	0	20

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

GC VOA

Analysis Batch: 45309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-1	FS10	Total/NA	Solid	8021B	45339
890-3946-2	FS11	Total/NA	Solid	8021B	45339
890-3946-3	FS12	Total/NA	Solid	8021B	45339
MB 880-45339/5-A	Method Blank	Total/NA	Solid	8021B	45339
LCS 880-45339/1-A	Lab Control Sample	Total/NA	Solid	8021B	45339
LCSD 880-45339/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	45339
890-3944-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	45339
890-3944-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	45339

Prep Batch: 45339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-1	FS10	Total/NA	Solid	5035	
890-3946-2	FS11	Total/NA	Solid	5035	
890-3946-3	FS12	Total/NA	Solid	5035	
MB 880-45339/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-45339/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-45339/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3944-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3944-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 45466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-1	FS10	Total/NA	Solid	Total BTEX	
890-3946-2	FS11	Total/NA	Solid	Total BTEX	
890-3946-3	FS12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 45337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-1	FS10	Total/NA	Solid	8015NM Prep	
890-3946-2	FS11	Total/NA	Solid	8015NM Prep	
890-3946-3	FS12	Total/NA	Solid	8015NM Prep	
MB 880-45337/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-45337/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-45337/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3923-A-3-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3923-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 45443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-1	FS10	Total/NA	Solid	8015B NM	45337
890-3946-2	FS11	Total/NA	Solid	8015B NM	45337
890-3946-3	FS12	Total/NA	Solid	8015B NM	45337
MB 880-45337/1-A	Method Blank	Total/NA	Solid	8015B NM	45337
LCS 880-45337/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	45337
LCSD 880-45337/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	45337
890-3923-A-3-E MS	Matrix Spike	Total/NA	Solid	8015B NM	45337
890-3923-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	45337

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QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

GC Semi VOA

Analysis Batch: 45501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-1	FS10	Total/NA	Solid	8015 NM	
890-3946-2	FS11	Total/NA	Solid	8015 NM	
890-3946-3	FS12	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 44970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-1	FS10	Soluble	Solid	DI Leach	
890-3946-2	FS11	Soluble	Solid	DI Leach	
890-3946-3	FS12	Soluble	Solid	DI Leach	
MB 880-44970/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3946-2 MS	FS11	Soluble	Solid	DI Leach	
890-3946-2 MSD	FS11	Soluble	Solid	DI Leach	

Analysis Batch: 45040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-1	FS10	Soluble	Solid	300.0	44970
890-3946-2	FS11	Soluble	Solid	300.0	44970
890-3946-3	FS12	Soluble	Solid	300.0	44970
MB 880-44970/1-A	Method Blank	Soluble	Solid	300.0	44970
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	300.0	44970
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44970
890-3946-2 MS	FS11	Soluble	Solid	300.0	44970
890-3946-2 MSD	FS11	Soluble	Solid	300.0	44970

Lab Chronicle

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

Client Sample ID: FS10
Date Collected: 01/23/23 13:30
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3946-1
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	45339	02/03/23 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45309	02/03/23 15:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45466	02/04/23 10:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45501	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45337	02/03/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 18:48	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 10:55	CH	EET MID

Client Sample ID: FS11
Date Collected: 01/23/23 13:35
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3946-2
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	45339	02/03/23 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45309	02/03/23 17:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45466	02/04/23 10:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45501	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45337	02/03/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 19:10	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 11:01	CH	EET MID

Client Sample ID: FS12
Date Collected: 01/23/23 13:40
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3946-3
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	45339	02/03/23 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45309	02/03/23 17:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45466	02/04/23 10:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45501	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	45337	02/03/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 19:31	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 11:20	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3946-1
SDG: 03D2057046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3946-1	FS10	Solid	01/23/23 13:30	01/24/23 08:44	1'
890-3946-2	FS11	Solid	01/23/23 13:35	01/24/23 08:44	1'
890-3946-3	FS12	Solid	01/23/23 13:40	01/24/23 08:44	1'

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3946-1

SDG Number: 03D2057046

Login Number: 3946

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: 890-3946-1

SDG Number: 03D2057046

Login Number: 3946

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 01/25/23 12:13 PM

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: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 2/5/2023 9:39:17 AM

JOB DESCRIPTION

State FTG #001
SDG NUMBER 03D2057046

JOB NUMBER

890-3947-1

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
2/5/2023 9:39:17 AM

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

Client: Ensolum
Project/Site: State FTG #001

Laboratory Job ID: 890-3947-1
SDG: 03D2057046

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Definitions/Glossary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

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
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: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

Job ID: 890-3947-1

Laboratory: Eurofins Carlsbad

Narrative	
Job Narrative 890-3947-1	

Receipt

The samples were received on 1/24/2023 8:44 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 4.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH02 (890-3947-1) and PH02 (890-3947-2).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: PH02 (890-3947-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

Client Sample ID: PH02

Lab Sample ID: 890-3947-1

Date Collected: 01/23/23 11:50

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 0.5'

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		02/03/23 09:22	02/04/23 10:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:22	02/04/23 10:56	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:22	02/04/23 10:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		02/03/23 09:22	02/04/23 10:56	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:22	02/04/23 10:56	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		02/03/23 09:22	02/04/23 10:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	02/03/23 09:22	02/04/23 10:56	1
1,4-Difluorobenzene (Surr)	100		70 - 130	02/03/23 09:22	02/04/23 10:56	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			02/05/23 10:21	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			02/05/23 09:31	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		02/03/23 09:29	02/04/23 21:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/03/23 09:29	02/04/23 21:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/03/23 09:29	02/04/23 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	02/03/23 09:29	02/04/23 21:19	1
o-Terphenyl	83		70 - 130	02/03/23 09:29	02/04/23 21:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.0		4.96	mg/Kg			01/30/23 11:26	1

Client Sample ID: PH02

Lab Sample ID: 890-3947-2

Date Collected: 01/23/23 11:55

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 2'

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		02/03/23 09:22	02/04/23 11:23	1
Toluene	<0.00201	U	0.00201	mg/Kg		02/03/23 09:22	02/04/23 11:23	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		02/03/23 09:22	02/04/23 11:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/03/23 09:22	02/04/23 11:23	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/03/23 09:22	02/04/23 11:23	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/03/23 09:22	02/04/23 11:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	38	S1-	70 - 130	02/03/23 09:22	02/04/23 11:23	1

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Client Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

Client Sample ID: PH02

Lab Sample ID: 890-3947-2

Date Collected: 01/23/23 11:55

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 2'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130	02/03/23 09:22	02/04/23 11:23	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			02/05/23 10:21	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			02/05/23 09:31	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		02/03/23 09:29	02/04/23 22:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 22:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 22:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			02/03/23 09:29	02/04/23 22:25	1
o-Terphenyl	100		70 - 130			02/03/23 09:29	02/04/23 22:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.02	U	5.02	mg/Kg			01/30/23 11:44	1

Surrogate Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

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)
890-3940-A-1-C MS	Matrix Spike	106	107
890-3940-A-1-D MSD	Matrix Spike Duplicate	90	106
890-3947-1	PH02	94	100
890-3947-2	PH02	38 S1-	103
LCS 880-45336/1-A	Lab Control Sample	86	104
LCSD 880-45336/2-A	Lab Control Sample Dup	95	106
MB 880-45336/5-A	Method Blank	64 S1-	95
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)
890-3947-1	PH02	87	83
890-3947-1 MS	PH02	110	89
890-3947-1 MSD	PH02	123	97
890-3947-2	PH02	106	100
LCS 880-45338/2-A	Lab Control Sample	115	99
LCSD 880-45338/3-A	Lab Control Sample Dup	114	98
MB 880-45338/1-A	Method Blank	109	108
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-45336/5-A

Matrix: Solid

Analysis Batch: 45307

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45336

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:22	02/03/23 12:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:22	02/03/23 12:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:22	02/03/23 12:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/23 09:22	02/03/23 12:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:22	02/03/23 12:40	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/23 09:22	02/03/23 12:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130	02/03/23 09:22	02/03/23 12:40	1
1,4-Difluorobenzene (Surr)	95		70 - 130	02/03/23 09:22	02/03/23 12:40	1

Lab Sample ID: LCS 880-45336/1-A

Matrix: Solid

Analysis Batch: 45307

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1031		mg/Kg		103	70 - 130
Toluene	0.100	0.09751		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09723		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.1957		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09666		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-45336/2-A

Matrix: Solid

Analysis Batch: 45307

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45336

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1071		mg/Kg		107	70 - 130	4	35
Toluene	0.100	0.1057		mg/Kg		106	70 - 130	8	35
Ethylbenzene	0.100	0.1042		mg/Kg		104	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2107		mg/Kg		105	70 - 130	7	35
o-Xylene	0.100	0.1090		mg/Kg		109	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-3940-A-1-C MS

Matrix: Solid

Analysis Batch: 45307

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45336

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0998	0.1231		mg/Kg		123	70 - 130
Toluene	<0.00201	U	0.0998	0.1255		mg/Kg		126	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

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

Lab Sample ID: 890-3940-A-1-C MS

Matrix: Solid

Analysis Batch: 45307

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45336

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.0998	0.1243		mg/Kg		125	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2459		mg/Kg		123	70 - 130
o-Xylene	<0.00201	U	0.0998	0.1246		mg/Kg		125	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-3940-A-1-D MSD

Matrix: Solid

Analysis Batch: 45307

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 45336

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.100	0.1021		mg/Kg		102	70 - 130	19	35
Toluene	<0.00201	U	0.100	0.09949		mg/Kg		99	70 - 130	23	35
Ethylbenzene	<0.00201	U	0.100	0.09971		mg/Kg		100	70 - 130	22	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1993		mg/Kg		99	70 - 130	21	35
o-Xylene	<0.00201	U	0.100	0.09513		mg/Kg		95	70 - 130	27	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

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

Lab Sample ID: MB 880-45338/1-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45338

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	02/03/23 09:29	02/04/23 20:13	1
o-Terphenyl	108		70 - 130	02/03/23 09:29	02/04/23 20:13	1

Lab Sample ID: LCS 880-45338/2-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	999	970.1		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	999	939.7		mg/Kg		94	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

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

Lab Sample ID: LCS 880-45338/2-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45338

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: LCSD 880-45338/3-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45338

			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			999	874.8		mg/Kg		88	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			999	931.5		mg/Kg		93	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-3947-1 MS

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 45338

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	869.5		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	872.5		mg/Kg		87	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 890-3947-1 MSD

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 45338

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	961.8		mg/Kg		93	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	952.2		mg/Kg		95	70 - 130	9	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	97		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44970/1-A

Matrix: Solid

Analysis Batch: 45040

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			01/30/23 09:16	1

Lab Sample ID: LCS 880-44970/2-A

Matrix: Solid

Analysis Batch: 45040

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.2		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-44970/3-A

Matrix: Solid

Analysis Batch: 45040

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	253.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-3946-A-2-B MS

Matrix: Solid

Analysis Batch: 45040

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	59.9		248	291.0		mg/Kg		93	90 - 110

Lab Sample ID: 890-3946-A-2-C MSD

Matrix: Solid

Analysis Batch: 45040

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	59.9		248	291.2		mg/Kg		93	90 - 110	0	20

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QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

GC VOA

Analysis Batch: 45307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3947-1	PH02	Total/NA	Solid	8021B	45336
890-3947-2	PH02	Total/NA	Solid	8021B	45336
MB 880-45336/5-A	Method Blank	Total/NA	Solid	8021B	45336
LCS 880-45336/1-A	Lab Control Sample	Total/NA	Solid	8021B	45336
LCSD 880-45336/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	45336
890-3940-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	45336
890-3940-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	45336

Prep Batch: 45336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3947-1	PH02	Total/NA	Solid	5035	
890-3947-2	PH02	Total/NA	Solid	5035	
MB 880-45336/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-45336/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-45336/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3940-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3940-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 45529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3947-1	PH02	Total/NA	Solid	Total BTEX	
890-3947-2	PH02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 45338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3947-1	PH02	Total/NA	Solid	8015NM Prep	
890-3947-2	PH02	Total/NA	Solid	8015NM Prep	
MB 880-45338/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-45338/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-45338/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3947-1 MS	PH02	Total/NA	Solid	8015NM Prep	
890-3947-1 MSD	PH02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 45443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3947-1	PH02	Total/NA	Solid	8015B NM	45338
890-3947-2	PH02	Total/NA	Solid	8015B NM	45338
MB 880-45338/1-A	Method Blank	Total/NA	Solid	8015B NM	45338
LCS 880-45338/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	45338
LCSD 880-45338/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	45338
890-3947-1 MS	PH02	Total/NA	Solid	8015B NM	45338
890-3947-1 MSD	PH02	Total/NA	Solid	8015B NM	45338

Analysis Batch: 45502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3947-1	PH02	Total/NA	Solid	8015 NM	
890-3947-2	PH02	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

HPLC/IC

Leach Batch: 44970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3947-1	PH02	Soluble	Solid	DI Leach	
890-3947-2	PH02	Soluble	Solid	DI Leach	
MB 880-44970/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3946-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3946-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 45040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3947-1	PH02	Soluble	Solid	300.0	44970
890-3947-2	PH02	Soluble	Solid	300.0	44970
MB 880-44970/1-A	Method Blank	Soluble	Solid	300.0	44970
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	300.0	44970
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44970
890-3946-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	44970
890-3946-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44970

Lab Chronicle

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

Client Sample ID: PH02
Date Collected: 01/23/23 11:50
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3947-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	45336	02/03/23 09:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45307	02/04/23 10:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45529	02/05/23 10:21	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45502	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	45338	02/03/23 09:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 21:19	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 11:26	CH	EET MID

Client Sample ID: PH02
Date Collected: 01/23/23 11:55
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3947-2
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			4.98 g	5 mL	45336	02/03/23 09:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45307	02/04/23 11:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45529	02/05/23 10:21	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45502	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45338	02/03/23 09:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 22:25	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 11:44	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3947-1
SDG: 03D2057046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3947-1	PH02	Solid	01/23/23 11:50	01/24/23 08:44	0.5'
890-3947-2	PH02	Solid	01/23/23 11:55	01/24/23 08:44	2'

- 1
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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3947-1

SDG Number: 03D2057046

Login Number: 3947

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: 890-3947-1

SDG Number: 03D2057046

Login Number: 3947

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 01/25/23 12:13 PM

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: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 2/5/2023 9:35:22 AM

JOB DESCRIPTION

State FTG #001
SDG NUMBER 03D2057046


JOB NUMBER

890-3948-1

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
2/5/2023 9:35:22 AM

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

Client: Ensolum
Project/Site: State FTG #001

Laboratory Job ID: 890-3948-1
SDG: 03D2057046

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Definitions/Glossary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

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
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: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

Job ID: 890-3948-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-3948-1****Receipt**

The sample was received on 1/24/2023 8:44 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: PH01 (890-3948-1).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-45339 and analytical batch 880-45309 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3944-A-1-G). 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

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: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

Client Sample ID: PH01

Lab Sample ID: 890-3948-1

Date Collected: 01/23/23 12:00

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 17:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 17:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 17:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/03/23 09:50	02/03/23 17:53	1
o-Xylene	0.0167		0.00199	mg/Kg		02/03/23 09:50	02/03/23 17:53	1
Xylenes, Total	0.0167		0.00398	mg/Kg		02/03/23 09:50	02/03/23 17:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	02/03/23 09:50	02/03/23 17:53	1
1,4-Difluorobenzene (Surr)	80		70 - 130	02/03/23 09:50	02/03/23 17:53	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0167		0.00398	mg/Kg			02/04/23 10:12	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			02/05/23 09:31	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		02/03/23 09:29	02/04/23 22:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/03/23 09:29	02/04/23 22:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/03/23 09:29	02/04/23 22:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			02/03/23 09:29	02/04/23 22:47	1
o-Terphenyl	86		70 - 130			02/03/23 09:29	02/04/23 22:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.89		4.99	mg/Kg			01/30/23 11:51	1

Eurofins Carlsbad

Surrogate Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

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)
890-3944-A-1-E MS	Matrix Spike	64 S1-	88
890-3944-A-1-F MSD	Matrix Spike Duplicate	119	100
890-3948-1	PH01	112	80
LCS 880-45339/1-A	Lab Control Sample	98	95
LCSD 880-45339/2-A	Lab Control Sample Dup	104	95
MB 880-45339/5-A	Method Blank	75	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 (70-130)	OTPH1 (70-130)
890-3947-A-1-D MS	Matrix Spike	110	89
890-3947-A-1-E MSD	Matrix Spike Duplicate	123	97
890-3948-1	PH01	89	86
LCS 880-45338/2-A	Lab Control Sample	115	99
LCSD 880-45338/3-A	Lab Control Sample Dup	114	98
MB 880-45338/1-A	Method Blank	109	108
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-45339/5-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45339

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/23 09:50	02/03/23 12:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	02/03/23 09:50	02/03/23 12:24	1
1,4-Difluorobenzene (Surr)	93		70 - 130	02/03/23 09:50	02/03/23 12:24	1

Lab Sample ID: LCS 880-45339/1-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1035		mg/Kg		103	70 - 130
Toluene	0.100	0.09635		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09708		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2017		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1095		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-45339/2-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1043		mg/Kg		104	70 - 130	1	35
Toluene	0.100	0.09819		mg/Kg		98	70 - 130	2	35
Ethylbenzene	0.100	0.09855		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2080		mg/Kg		104	70 - 130	3	35
o-Xylene	0.100	0.1070		mg/Kg		107	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-3944-A-1-E MS

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.06961		mg/Kg		70	70 - 130
Toluene	<0.00200	U	0.0996	0.08014		mg/Kg		80	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

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

Lab Sample ID: 890-3944-A-1-E MS

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.07706		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.199	0.1174	F1	mg/Kg		59	70 - 130
o-Xylene	<0.00200	U F1 F2	0.0996	0.05641	F1	mg/Kg		56	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130						
1,4-Difluorobenzene (Surr)	88		70 - 130						

Lab Sample ID: 890-3944-A-1-F MSD

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 45339

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	0.09353		mg/Kg		93	70 - 130	29	35
Toluene	<0.00200	U	0.100	0.09465		mg/Kg		94	70 - 130	17	35
Ethylbenzene	<0.00200	U	0.100	0.1052		mg/Kg		105	70 - 130	31	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.2304	F2	mg/Kg		115	70 - 130	65	35
o-Xylene	<0.00200	U F1 F2	0.100	0.1150	F2	mg/Kg		114	70 - 130	68	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	119		70 - 130								
1,4-Difluorobenzene (Surr)	100		70 - 130								

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

Lab Sample ID: MB 880-45338/1-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45338

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			02/03/23 09:29	02/04/23 20:13	1
o-Terphenyl	108		70 - 130			02/03/23 09:29	02/04/23 20:13	1

Lab Sample ID: LCS 880-45338/2-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	999	970.1		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	999	939.7		mg/Kg		94	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

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

Lab Sample ID: LCS 880-45338/2-A
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45338

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: LCSD 880-45338/3-A
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 45338

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	999	874.8		mg/Kg		88	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	999	931.5		mg/Kg		93	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-3947-A-1-D MS
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 45338

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	<50.0	U	1000	869.5		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	872.5		mg/Kg		87	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 890-3947-A-1-E MSD
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 45338

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	961.8		mg/Kg		93	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	952.2		mg/Kg		95	70 - 130	9	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	97		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44970/1-A

Matrix: Solid

Analysis Batch: 45040

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			01/30/23 09:16	1

Lab Sample ID: LCS 880-44970/2-A

Matrix: Solid

Analysis Batch: 45040

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.2		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-44970/3-A

Matrix: Solid

Analysis Batch: 45040

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	253.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-3946-A-2-B MS

Matrix: Solid

Analysis Batch: 45040

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	59.9		248	291.0		mg/Kg		93	90 - 110

Lab Sample ID: 890-3946-A-2-C MSD

Matrix: Solid

Analysis Batch: 45040

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	59.9		248	291.2		mg/Kg		93	90 - 110	0	20

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QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

GC VOA

Analysis Batch: 45309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3948-1	PH01	Total/NA	Solid	8021B	45339
MB 880-45339/5-A	Method Blank	Total/NA	Solid	8021B	45339
LCS 880-45339/1-A	Lab Control Sample	Total/NA	Solid	8021B	45339
LCSD 880-45339/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	45339
890-3944-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	45339
890-3944-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	45339

Prep Batch: 45339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3948-1	PH01	Total/NA	Solid	5035	
MB 880-45339/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-45339/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-45339/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3944-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3944-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 45467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3948-1	PH01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 45338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3948-1	PH01	Total/NA	Solid	8015NM Prep	
MB 880-45338/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-45338/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-45338/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3947-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3947-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 45443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3948-1	PH01	Total/NA	Solid	8015B NM	45338
MB 880-45338/1-A	Method Blank	Total/NA	Solid	8015B NM	45338
LCS 880-45338/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	45338
LCSD 880-45338/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	45338
890-3947-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	45338
890-3947-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	45338

Analysis Batch: 45503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3948-1	PH01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 44970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3948-1	PH01	Soluble	Solid	DI Leach	
MB 880-44970/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

HPLC/IC (Continued)

Leach Batch: 44970 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3946-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3946-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 45040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3948-1	PH01	Soluble	Solid	300.0	44970
MB 880-44970/1-A	Method Blank	Soluble	Solid	300.0	44970
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	300.0	44970
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44970
890-3946-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	44970
890-3946-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44970

Lab Chronicle

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

Client Sample ID: PH01
Date Collected: 01/23/23 12:00
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3948-1
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	45339	02/03/23 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45309	02/03/23 17:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45467	02/04/23 10:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45503	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	45338	02/03/23 09:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 22:47	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 11:51	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3948-1
SDG: 03D2057046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3948-1	PH01	Solid	01/23/23 12:00	01/24/23 08:44	1'

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3948-1

SDG Number: 03D2057046

Login Number: 3948

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: 890-3948-1

SDG Number: 03D2057046

Login Number: 3948

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 01/25/23 12:13 PM

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: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 2/5/2023 9:35:54 AM

JOB DESCRIPTION

State FTG #001
SDG NUMBER 03D2057046

JOB NUMBER

890-3949-1

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
2/5/2023 9:35:54 AM

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

Client: Ensolum
Project/Site: State FTG #001

Laboratory Job ID: 890-3949-1
SDG: 03D2057046

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Definitions/Glossary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

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
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: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

Job ID: 890-3949-1

Laboratory: Eurofins Carlsbad

Narrative

**Job Narrative
890-3949-1**

Receipt

The samples were received on 1/24/2023 8:44 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 4.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH04 (890-3949-1) and PH04 (890-3949-2).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-45339 and analytical batch 880-45309 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3944-A-1-G). 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

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: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

Client Sample ID: PH04

Lab Sample ID: 890-3949-1

Date Collected: 01/23/23 11:30

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 0.5'

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		02/03/23 09:50	02/03/23 18:14	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/03/23 09:50	02/03/23 18:14	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/03/23 09:50	02/03/23 18:14	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		02/03/23 09:50	02/03/23 18:14	1
o-Xylene	0.00339		0.00198	mg/Kg		02/03/23 09:50	02/03/23 18:14	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		02/03/23 09:50	02/03/23 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	02/03/23 09:50	02/03/23 18:14	1
1,4-Difluorobenzene (Surr)	71		70 - 130	02/03/23 09:50	02/03/23 18:14	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			02/04/23 10:12	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			02/05/23 09:31	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		02/03/23 09:29	02/04/23 23:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/03/23 09:29	02/04/23 23:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/03/23 09:29	02/04/23 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	02/03/23 09:29	02/04/23 23:09	1
o-Terphenyl	83		70 - 130	02/03/23 09:29	02/04/23 23:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.39		4.95	mg/Kg			01/30/23 11:57	1

Client Sample ID: PH04

Lab Sample ID: 890-3949-2

Date Collected: 01/23/23 11:35

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		02/03/23 09:50	02/03/23 18:34	1
Toluene	<0.00201	U	0.00201	mg/Kg		02/03/23 09:50	02/03/23 18:34	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		02/03/23 09:50	02/03/23 18:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/03/23 09:50	02/03/23 18:34	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/03/23 09:50	02/03/23 18:34	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/03/23 09:50	02/03/23 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	02/03/23 09:50	02/03/23 18:34	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

Client Sample ID: PH04

Lab Sample ID: 890-3949-2

Date Collected: 01/23/23 11:35

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130	02/03/23 09:50	02/03/23 18:34	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	-		02/04/23 10:12	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	-		02/05/23 09:31	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		02/03/23 09:29	02/04/23 23:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 23:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 23:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			02/03/23 09:29	02/04/23 23:31	1
o-Terphenyl	93		70 - 130			02/03/23 09:29	02/04/23 23:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	128		4.95	mg/Kg	-		01/30/23 12:03	1

Surrogate Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

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)
890-3944-A-1-E MS	Matrix Spike	64 S1-	88
890-3944-A-1-F MSD	Matrix Spike Duplicate	119	100
890-3949-1	PH04	93	71
890-3949-2	PH04	79	64 S1-
LCS 880-45339/1-A	Lab Control Sample	98	95
LCSD 880-45339/2-A	Lab Control Sample Dup	104	95
MB 880-45339/5-A	Method Blank	75	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 (70-130)	OTPH1 (70-130)
890-3947-A-1-D MS	Matrix Spike	110	89
890-3947-A-1-E MSD	Matrix Spike Duplicate	123	97
890-3949-1	PH04	86	83
890-3949-2	PH04	98	93
LCS 880-45338/2-A	Lab Control Sample	115	99
LCSD 880-45338/3-A	Lab Control Sample Dup	114	98
MB 880-45338/1-A	Method Blank	109	108
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-45339/5-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45339

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/23 09:50	02/03/23 12:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	02/03/23 09:50	02/03/23 12:24	1
1,4-Difluorobenzene (Surr)	93		70 - 130	02/03/23 09:50	02/03/23 12:24	1

Lab Sample ID: LCS 880-45339/1-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1035		mg/Kg		103	70 - 130
Toluene	0.100	0.09635		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09708		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2017		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1095		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-45339/2-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1043		mg/Kg		104	70 - 130	1	35
Toluene	0.100	0.09819		mg/Kg		98	70 - 130	2	35
Ethylbenzene	0.100	0.09855		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2080		mg/Kg		104	70 - 130	3	35
o-Xylene	0.100	0.1070		mg/Kg		107	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-3944-A-1-E MS

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.06961		mg/Kg		70	70 - 130
Toluene	<0.00200	U	0.0996	0.08014		mg/Kg		80	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

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

Lab Sample ID: 890-3944-A-1-E MS

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.07706		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.199	0.1174	F1	mg/Kg		59	70 - 130
o-Xylene	<0.00200	U F1 F2	0.0996	0.05641	F1	mg/Kg		56	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 890-3944-A-1-F MSD

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 45339

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	0.09353		mg/Kg		93	70 - 130	29	35
Toluene	<0.00200	U	0.100	0.09465		mg/Kg		94	70 - 130	17	35
Ethylbenzene	<0.00200	U	0.100	0.1052		mg/Kg		105	70 - 130	31	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.2304	F2	mg/Kg		115	70 - 130	65	35
o-Xylene	<0.00200	U F1 F2	0.100	0.1150	F2	mg/Kg		114	70 - 130	68	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-45338/1-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45338

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	02/03/23 09:29	02/04/23 20:13	1
o-Terphenyl	108		70 - 130	02/03/23 09:29	02/04/23 20:13	1

Lab Sample ID: LCS 880-45338/2-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	999	970.1		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	999	939.7		mg/Kg		94	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

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

Lab Sample ID: LCS 880-45338/2-A
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45338

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: LCSD 880-45338/3-A
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 45338

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	999	874.8		mg/Kg		88	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	999	931.5		mg/Kg		93	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-3947-A-1-D MS
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 45338

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	<50.0	U	1000	869.5		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	872.5		mg/Kg		87	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 890-3947-A-1-E MSD
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 45338

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	961.8		mg/Kg		93	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	952.2		mg/Kg		95	70 - 130	9	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	97		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44970/1-A
Matrix: Solid
Analysis Batch: 45040

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			01/30/23 09:16	1

Lab Sample ID: LCS 880-44970/2-A
Matrix: Solid
Analysis Batch: 45040

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.2		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-44970/3-A
Matrix: Solid
Analysis Batch: 45040

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	253.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-3946-A-2-B MS
Matrix: Solid
Analysis Batch: 45040

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	59.9		248	291.0		mg/Kg		93	90 - 110

Lab Sample ID: 890-3946-A-2-C MSD
Matrix: Solid
Analysis Batch: 45040

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	59.9		248	291.2		mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

GC VOA

Analysis Batch: 45309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3949-1	PH04	Total/NA	Solid	8021B	45339
890-3949-2	PH04	Total/NA	Solid	8021B	45339
MB 880-45339/5-A	Method Blank	Total/NA	Solid	8021B	45339
LCS 880-45339/1-A	Lab Control Sample	Total/NA	Solid	8021B	45339
LCSD 880-45339/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	45339
890-3944-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	45339
890-3944-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	45339

Prep Batch: 45339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3949-1	PH04	Total/NA	Solid	5035	
890-3949-2	PH04	Total/NA	Solid	5035	
MB 880-45339/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-45339/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-45339/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3944-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3944-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 45468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3949-1	PH04	Total/NA	Solid	Total BTEX	
890-3949-2	PH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 45338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3949-1	PH04	Total/NA	Solid	8015NM Prep	
890-3949-2	PH04	Total/NA	Solid	8015NM Prep	
MB 880-45338/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-45338/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-45338/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3947-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3947-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 45443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3949-1	PH04	Total/NA	Solid	8015B NM	45338
890-3949-2	PH04	Total/NA	Solid	8015B NM	45338
MB 880-45338/1-A	Method Blank	Total/NA	Solid	8015B NM	45338
LCS 880-45338/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	45338
LCSD 880-45338/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	45338
890-3947-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	45338
890-3947-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	45338

Analysis Batch: 45504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3949-1	PH04	Total/NA	Solid	8015 NM	
890-3949-2	PH04	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

HPLC/IC

Leach Batch: 44970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3949-1	PH04	Soluble	Solid	DI Leach	
890-3949-2	PH04	Soluble	Solid	DI Leach	
MB 880-44970/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3946-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3946-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 45040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3949-1	PH04	Soluble	Solid	300.0	44970
890-3949-2	PH04	Soluble	Solid	300.0	44970
MB 880-44970/1-A	Method Blank	Soluble	Solid	300.0	44970
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	300.0	44970
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44970
890-3946-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	44970
890-3946-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44970

Lab Chronicle

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

Client Sample ID: PH04
Date Collected: 01/23/23 11:30
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3949-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	45339	02/03/23 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45309	02/03/23 18:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45468	02/04/23 10:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45504	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	45338	02/03/23 09:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 23:09	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 11:57	CH	EET MID

Client Sample ID: PH04
Date Collected: 01/23/23 11:35
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3949-2
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	45339	02/03/23 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45309	02/03/23 18:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45468	02/04/23 10:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45504	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45338	02/03/23 09:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 23:31	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 12:03	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3949-1
SDG: 03D2057046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3949-1	PH04	Solid	01/23/23 11:30	01/24/23 08:44	0.5'
890-3949-2	PH04	Solid	01/23/23 11:35	01/24/23 08:44	1'

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Environment Testing
Xenco

Chain of Custody

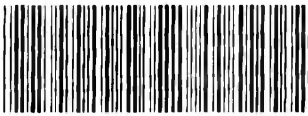
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

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

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:	

Project Name:	State FTG #001		Turn Around		ANALYSIS REQUEST										Preservative Codes							
Project Number:	03D2057046		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code													None: NO	DI Water: H ₂ O			
Project Location:	Lea County, NM		Due Date:		Parameters	TPH (8015)	Chlorides	BTEX (8021)										Cool: Cool	MeOH: Me			
Sampler's Name:	Conner Shore		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			
																		H ₃ PO ₄ : HP				
SAMPLE RECEIPT		Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	 890-3949 Chain of Custody													NaHSO ₄ : NABIS			
Samples Received Intact:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:		TMM-007														Na ₂ S ₂ O ₃ : NaSO ₃			
Cooler Custody Seals:		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor:		0.2														Zn Acetate+NaOH: Zn			
Sample Custody Seals:		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Temperature Reading:		4.2														NaOH+Ascorbic Acid: SAPC			
Total Containers:				Corrected Temperature:		4.0																
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH (8015)	Chlorides	BTEX (8021)									Sample Comments				
PH04	S	1.23.23	1130	0.5'	G	1	x	x	x													
PH04	S	1.23.23	1135	1'	G	1	x	x	x													
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; opacity: 0.5;"> 1-23-23 </div> </div>																			Incident Number			
																			NAPP2233947938			

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		01/24/23 @ 0830	2		
3		1-24-23 0844	4		
5			6		

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3949-1

SDG Number: 03D2057046

Login Number: 3949

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: 890-3949-1

SDG Number: 03D2057046

Login Number: 3949

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 01/25/23 12:13 PM

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: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 2/5/2023 9:36:15 AM

JOB DESCRIPTION

State FTG #001
SDG NUMBER 03D2057046

JOB NUMBER

890-3950-1

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
2/5/2023 9:36:15 AM

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

Client: Ensolum
Project/Site: State FTG #001

Laboratory Job ID: 890-3950-1
SDG: 03D2057046

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Definitions/Glossary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

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
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: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

Job ID: 890-3950-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-3950-1****Receipt**

The samples were received on 1/24/2023 8:44 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 4.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH03 (890-3950-1) and PH03 (890-3950-2).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-45339 and analytical batch 880-45309 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3944-A-1-G). 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

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: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

Client Sample ID: PH03

Lab Sample ID: 890-3950-1

Date Collected: 01/23/23 11:40

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 0.5'

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		02/03/23 09:50	02/03/23 18:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 18:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 18:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		02/03/23 09:50	02/03/23 18:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 18:55	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		02/03/23 09:50	02/03/23 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	02/03/23 09:50	02/03/23 18:55	1
1,4-Difluorobenzene (Surr)	81		70 - 130	02/03/23 09:50	02/03/23 18:55	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			02/04/23 10:12	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			02/05/23 09:31	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		02/03/23 09:29	02/04/23 23:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 23:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	02/03/23 09:29	02/04/23 23:53	1
o-Terphenyl	83		70 - 130	02/03/23 09:29	02/04/23 23:53	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.2		4.97	mg/Kg			01/30/23 12:09	1

Client Sample ID: PH03

Lab Sample ID: 890-3950-2

Date Collected: 01/23/23 11:45

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 19:15	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 19:15	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 19:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/03/23 09:50	02/03/23 19:15	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/03/23 09:50	02/03/23 19:15	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/03/23 09:50	02/03/23 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	02/03/23 09:50	02/03/23 19:15	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

Client Sample ID: PH03

Lab Sample ID: 890-3950-2

Date Collected: 01/23/23 11:45

Matrix: Solid

Date Received: 01/24/23 08:44

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	02/03/23 09:50	02/03/23 19:15	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			02/04/23 10:12	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			02/05/23 09:31	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		02/03/23 09:29	02/05/23 00:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/05/23 00:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/05/23 00:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			02/03/23 09:29	02/05/23 00:14	1
o-Terphenyl	95		70 - 130			02/03/23 09:29	02/05/23 00:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.5		5.00	mg/Kg			01/30/23 12:15	1

Surrogate Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

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)
890-3944-A-1-E MS	Matrix Spike	64 S1-	88
890-3944-A-1-F MSD	Matrix Spike Duplicate	119	100
890-3950-1	PH03	79	81
890-3950-2	PH03	107	85
LCS 880-45339/1-A	Lab Control Sample	98	95
LCSD 880-45339/2-A	Lab Control Sample Dup	104	95
MB 880-45339/5-A	Method Blank	75	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 (70-130)	OTPH1 (70-130)
890-3947-A-1-D MS	Matrix Spike	110	89
890-3947-A-1-E MSD	Matrix Spike Duplicate	123	97
890-3950-1	PH03	86	83
890-3950-2	PH03	102	95
LCS 880-45338/2-A	Lab Control Sample	115	99
LCSD 880-45338/3-A	Lab Control Sample Dup	114	98
MB 880-45338/1-A	Method Blank	109	108
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-45339/5-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45339

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/23 09:50	02/03/23 12:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/23 09:50	02/03/23 12:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	02/03/23 09:50	02/03/23 12:24	1
1,4-Difluorobenzene (Surr)	93		70 - 130	02/03/23 09:50	02/03/23 12:24	1

Lab Sample ID: LCS 880-45339/1-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1035		mg/Kg		103	70 - 130
Toluene	0.100	0.09635		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09708		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2017		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1095		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-45339/2-A

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1043		mg/Kg		104	70 - 130	1	35
Toluene	0.100	0.09819		mg/Kg		98	70 - 130	2	35
Ethylbenzene	0.100	0.09855		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2080		mg/Kg		104	70 - 130	3	35
o-Xylene	0.100	0.1070		mg/Kg		107	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-3944-A-1-E MS

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.06961		mg/Kg		70	70 - 130
Toluene	<0.00200	U	0.0996	0.08014		mg/Kg		80	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

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

Lab Sample ID: 890-3944-A-1-E MS

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 45339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.07706		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.199	0.1174	F1	mg/Kg		59	70 - 130
o-Xylene	<0.00200	U F1 F2	0.0996	0.05641	F1	mg/Kg		56	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 890-3944-A-1-F MSD

Matrix: Solid

Analysis Batch: 45309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 45339

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	0.09353		mg/Kg		93	70 - 130	29	35
Toluene	<0.00200	U	0.100	0.09465		mg/Kg		94	70 - 130	17	35
Ethylbenzene	<0.00200	U	0.100	0.1052		mg/Kg		105	70 - 130	31	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.2304	F2	mg/Kg		115	70 - 130	65	35
o-Xylene	<0.00200	U F1 F2	0.100	0.1150	F2	mg/Kg		114	70 - 130	68	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-45338/1-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45338

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/03/23 09:29	02/04/23 20:13	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	02/03/23 09:29	02/04/23 20:13	1
o-Terphenyl	108		70 - 130	02/03/23 09:29	02/04/23 20:13	1

Lab Sample ID: LCS 880-45338/2-A

Matrix: Solid

Analysis Batch: 45443

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	999	970.1		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	999	939.7		mg/Kg		94	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

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

Lab Sample ID: LCS 880-45338/2-A
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45338

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: LCSD 880-45338/3-A
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 45338

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	999	874.8		mg/Kg		88	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	999	931.5		mg/Kg		93	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-3947-A-1-D MS
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 45338

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	<50.0	U	1000	869.5		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	872.5		mg/Kg		87	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 890-3947-A-1-E MSD
Matrix: Solid
Analysis Batch: 45443

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 45338

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	961.8		mg/Kg		93	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	952.2		mg/Kg		95	70 - 130	9	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	97		70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44970/1-A

Matrix: Solid

Analysis Batch: 45040

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			01/30/23 09:16	1

Lab Sample ID: LCS 880-44970/2-A

Matrix: Solid

Analysis Batch: 45040

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.2		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-44970/3-A

Matrix: Solid

Analysis Batch: 45040

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	253.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-3946-A-2-B MS

Matrix: Solid

Analysis Batch: 45040

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	59.9		248	291.0		mg/Kg		93	90 - 110

Lab Sample ID: 890-3946-A-2-C MSD

Matrix: Solid

Analysis Batch: 45040

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	59.9		248	291.2		mg/Kg		93	90 - 110	0	20

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

GC VOA

Analysis Batch: 45309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3950-1	PH03	Total/NA	Solid	8021B	45339
890-3950-2	PH03	Total/NA	Solid	8021B	45339
MB 880-45339/5-A	Method Blank	Total/NA	Solid	8021B	45339
LCS 880-45339/1-A	Lab Control Sample	Total/NA	Solid	8021B	45339
LCSD 880-45339/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	45339
890-3944-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	45339
890-3944-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	45339

Prep Batch: 45339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3950-1	PH03	Total/NA	Solid	5035	
890-3950-2	PH03	Total/NA	Solid	5035	
MB 880-45339/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-45339/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-45339/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3944-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3944-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 45469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3950-1	PH03	Total/NA	Solid	Total BTEX	
890-3950-2	PH03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 45338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3950-1	PH03	Total/NA	Solid	8015NM Prep	
890-3950-2	PH03	Total/NA	Solid	8015NM Prep	
MB 880-45338/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-45338/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-45338/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3947-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3947-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 45443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3950-1	PH03	Total/NA	Solid	8015B NM	45338
890-3950-2	PH03	Total/NA	Solid	8015B NM	45338
MB 880-45338/1-A	Method Blank	Total/NA	Solid	8015B NM	45338
LCS 880-45338/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	45338
LCSD 880-45338/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	45338
890-3947-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	45338
890-3947-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	45338

Analysis Batch: 45505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3950-1	PH03	Total/NA	Solid	8015 NM	
890-3950-2	PH03	Total/NA	Solid	8015 NM	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

HPLC/IC

Leach Batch: 44970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3950-1	PH03	Soluble	Solid	DI Leach	
890-3950-2	PH03	Soluble	Solid	DI Leach	
MB 880-44970/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3946-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3946-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 45040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3950-1	PH03	Soluble	Solid	300.0	44970
890-3950-2	PH03	Soluble	Solid	300.0	44970
MB 880-44970/1-A	Method Blank	Soluble	Solid	300.0	44970
LCS 880-44970/2-A	Lab Control Sample	Soluble	Solid	300.0	44970
LCSD 880-44970/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44970
890-3946-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	44970
890-3946-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44970

Lab Chronicle

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

Client Sample ID: PH03
Date Collected: 01/23/23 11:40
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3950-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	45339	02/03/23 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45309	02/03/23 18:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45469	02/04/23 10:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45505	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	45338	02/03/23 09:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/04/23 23:53	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 12:09	CH	EET MID

Client Sample ID: PH03
Date Collected: 01/23/23 11:45
Date Received: 01/24/23 08:44

Lab Sample ID: 890-3950-2
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	45339	02/03/23 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45309	02/03/23 19:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45469	02/04/23 10:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45505	02/05/23 09:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45338	02/03/23 09:29	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45443	02/05/23 00:14	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44970	01/29/23 17:45	KS	EET MID
Soluble	Analysis	300.0		1			45040	01/30/23 12:15	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

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: State FTG #001

Job ID: 890-3950-1
SDG: 03D2057046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3950-1	PH03	Solid	01/23/23 11:40	01/24/23 08:44	0.5'
890-3950-2	PH03	Solid	01/23/23 11:45	01/24/23 08:44	1'

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3950-1

SDG Number: 03D2057046

Login Number: 3950

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: 890-3950-1

SDG Number: 03D2057046

Login Number: 3950

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 01/25/23 12:13 PM

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	



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 19, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: STATE FTG

Enclosed are the results of analyses for samples received by the laboratory on 07/18/23 14:02.

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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received: 07/18/2023
 Reported: 07/19/2023
 Project Name: STATE FTG
 Project Number: 03D2057088
 Project Location: MAVERICK 32.79316,-103.61882

Sampling Date: 07/18/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS 09 A @ 3' (H233724-01)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2023	ND	2.01	101	2.00	2.04		
Toluene*	<0.050	0.050	07/18/2023	ND	1.99	99.6	2.00	1.65		
Ethylbenzene*	<0.050	0.050	07/18/2023	ND	1.96	98.2	2.00	2.22		
Total Xylenes*	<0.150	0.150	07/18/2023	ND	5.84	97.3	6.00	2.61		
Total BTEX	<0.300	0.300	07/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	160	16.0	07/19/2023	ND	432	108	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	07/19/2023	ND	206	103	200	7.39	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	205	103	200	7.17	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 79.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received: 07/18/2023
 Reported: 07/19/2023
 Project Name: STATE FTG
 Project Number: 03D2057088
 Project Location: MAVERICK 32.79316,-103.61882

Sampling Date: 07/18/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS 10 A @ 3' (H233724-02)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2023	ND	2.01	101	2.00	2.04		
Toluene*	<0.050	0.050	07/18/2023	ND	1.99	99.6	2.00	1.65		
Ethylbenzene*	<0.050	0.050	07/18/2023	ND	1.96	98.2	2.00	2.22		
Total Xylenes*	<0.150	0.150	07/18/2023	ND	5.84	97.3	6.00	2.61		
Total BTEx	<0.300	0.300	07/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	96.0	16.0	07/19/2023	ND	432	108	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	07/19/2023	ND	206	103	200	7.39	
DRO >C10-C28*	31.1	10.0	07/19/2023	ND	205	103	200	7.17	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 81.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.7 % 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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received: 07/18/2023
 Reported: 07/19/2023
 Project Name: STATE FTG
 Project Number: 03D2057088
 Project Location: MAVERICK 32.79316,-103.61882

Sampling Date: 07/18/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: FS 12 A @ 3' (H233724-03)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2023	ND	2.01	101	2.00	2.04		
Toluene*	<0.050	0.050	07/18/2023	ND	1.99	99.6	2.00	1.65		
Ethylbenzene*	<0.050	0.050	07/18/2023	ND	1.96	98.2	2.00	2.22		
Total Xylenes*	<0.150	0.150	07/18/2023	ND	5.84	97.3	6.00	2.61		
Total BTEx	<0.300	0.300	07/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	288	16.0	07/19/2023	ND	432	108	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	07/19/2023	ND	206	103	200	7.39	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	205	103	200	7.17	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 73.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.8 % 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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received: 07/18/2023
 Reported: 07/19/2023
 Project Name: STATE FTG
 Project Number: 03D2057088
 Project Location: MAVERICK 32.79316,-103.61882

Sampling Date: 07/18/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SW 02 @ 0-3' (H233724-04)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2023	ND	2.01	101	2.00	2.04	
Toluene*	<0.050	0.050	07/18/2023	ND	1.99	99.6	2.00	1.65	
Ethylbenzene*	<0.050	0.050	07/18/2023	ND	1.96	98.2	2.00	2.22	
Total Xylenes*	<0.150	0.150	07/18/2023	ND	5.84	97.3	6.00	2.61	
Total BTX	<0.300	0.300	07/18/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	80.0	16.0	07/19/2023	ND	432	108	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	07/19/2023	ND	206	103	200	7.39	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	205	103	200	7.17	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 78.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.5 % 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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received: 07/18/2023
 Reported: 07/19/2023
 Project Name: STATE FTG
 Project Number: 03D2057088
 Project Location: MAVERICK 32.79316,-103.61882

Sampling Date: 07/18/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SW 03 @ 0-3' (H233724-05)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/19/2023	ND	2.01	101	2.00	2.04		
Toluene*	<0.050	0.050	07/19/2023	ND	1.99	99.6	2.00	1.65		
Ethylbenzene*	<0.050	0.050	07/19/2023	ND	1.96	98.2	2.00	2.22		
Total Xylenes*	<0.150	0.150	07/19/2023	ND	5.84	97.3	6.00	2.61		
Total BTEx	<0.300	0.300	07/19/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	64.0	16.0	07/19/2023	ND	432	108	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	07/19/2023	ND	206	103	200	7.39	
DRO >C10-C28*	<10.0	10.0	07/19/2023	ND	205	103	200	7.17	
EXT DRO >C28-C36	<10.0	10.0	07/19/2023	ND					

Surrogate: 1-Chlorooctane 78.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.5 % 49.1-148

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Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

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

Company Name: <u>Ensolum LLC</u>				BILL TO				ANALYSIS REQUEST																											
Project Manager: <u>Amel Cote</u>				P.O. #:																															
Address: <u>3122 Nat'l Parks Hwy</u>				Company: <u>AA</u>																															
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88270</u>				Attn:																															
Phone #: <u>720-384-7365</u> Fax #:				Address:																															
Project #: <u>State FTE1</u> Project Owner: <u>Maverick</u>				City:																															
Project Name: <u>DBD2051088</u>				State: Zip:																															
Project Location: <u>32-79316, -103.61882</u>				Phone #:																															
Sampler Name: <u>Julianne Falcumata</u>				Fax #:																															
FOR LAB USE ONLY																																			
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV.		SAMPLING		<u>RTX</u> <u>TPH</u> <u>Chlorides</u>																					
				GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE										OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME			
<u>H233724</u>				<u>C</u>		<u>X</u>		<u>X</u>		<u>X</u>																				<u>7/18/23</u>		<u>1030</u>			
<u>1</u>		<u>F509A @ 5'</u>																														<u>X</u>		<u>X</u>	
<u>2</u>		<u>F510A @ 3'</u>																														<u>X</u>		<u>X</u>	
<u>3</u>		<u>F512A @ 3'</u>																														<u>X</u>		<u>X</u>	
<u>4</u>		<u>SW02 @ 0-3'</u>																						<u>X</u>		<u>X</u>									
<u>5</u>		<u>SW03 @ 0-3'</u>																						<u>X</u>		<u>X</u>									

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Relinquished By: <u>[Signature]</u>		Date: <u>7/18/23</u>		Received By: <u>[Signature]</u>		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l phone #:	
		Time: <u>1402</u>				All Results are emailed. Please provide Email address:	
Relinquished By: <u>[Signature]</u>		Date:		Received By:		REMARKS:	
		Time:				<u>ardle@ensolum.com, jfalcumata@ensolum.com</u>	
Delivered By: (Circle One)		Observed Temp. °C		Sample Condition		Turnaround Time:	
Sampler - UPS - Bus - Other:		<u>4.1c</u>		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<u>#140</u> Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/>	
		Corrected Temp. °C		CHECKED BY: <u>[Signature]</u> (Initials)		Bacteria (only) Sample Condition	
						Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	
						Observed Temp. °C	
						Corrected Temp. °C	

FORM-006 R 5.3 07/18/22

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 18, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: STATE FTG

Enclosed are the results of analyses for samples received by the laboratory on 07/17/23 14:05.

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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received: 07/17/2023
 Reported: 07/18/2023
 Project Name: STATE FTG
 Project Number: 03D2024046
 Project Location: MAVERICK 32.79316,-103.61882

Sampling Date: 07/17/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW 01 0-2 (H233681-01)

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	07/17/2023	ND	2.10	105	2.00	0.540		
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760		
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265		
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346		
Total BTEx	<0.300	0.300	07/17/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 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	256	16.0	07/18/2023	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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 63.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received: 07/17/2023
 Reported: 07/18/2023
 Project Name: STATE FTG
 Project Number: 03D2024046
 Project Location: MAVERICK 32.79316,-103.61882

Sampling Date: 07/17/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FS 01 2 (H233681-02)

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	07/17/2023	ND	2.10	105	2.00	0.540		
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760		
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265		
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346		
Total BTEx	<0.300	0.300	07/17/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	224	16.0	07/18/2023	ND	448	112	400	3.64		

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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 62.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 69.3 % 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
 AIMEE COLE
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received: 07/17/2023
 Reported: 07/18/2023
 Project Name: STATE FTG
 Project Number: 03D2024046
 Project Location: MAVERICK 32.79316,-103.61882

Sampling Date: 07/17/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FS 08 2 (H233681-03)

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	07/17/2023	ND	2.10	105	2.00	0.540		
Toluene*	<0.050	0.050	07/17/2023	ND	2.07	103	2.00	0.0760		
Ethylbenzene*	<0.050	0.050	07/17/2023	ND	2.17	108	2.00	0.265		
Total Xylenes*	<0.150	0.150	07/17/2023	ND	6.50	108	6.00	0.346		
Total BTEx	<0.300	0.300	07/17/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	32.0	16.0	07/18/2023	ND	448	112	400	3.64		

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	07/18/2023	ND	170	85.1	200	0.445	
DRO >C10-C28*	<10.0	10.0	07/18/2023	ND	167	83.6	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	07/18/2023	ND					

Surrogate: 1-Chlorooctane 72.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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

Company Name: Ensolum, LLC				BILL TO				ANALYSIS REQUEST											
Project Manager: Aimee Cole				P.O. #: Kater Jennings															
Address: 3122 National Parks Hwy				Company: Ensolum LLC															
City: Carlsbad State: NM Zip: 88220				Attn:															
Phone #: 720-384-7365 Fax #:				Address:															
Project #: 03D20240416 Project Owner: Maverick				City:															
Project Name: State FTG				State: Zip:															
Project Location: 32.79316, -103.61882				Phone #:															
Sampler Name: Ronni Hayes				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX				PRESERV.		SAMPLING								
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL:	OTHER:	DATE	TIME	TPH	BTEX	CI-	
H233681																			
1	SW01	0-2	C	1			X				X			7/17/23	1210	X	X	X	
2	FS01	2	C	1			X				X			↓	1206	↓	↓	↓	
3	FS08	2	C	1			X				X			↓	1045	↓	↓	↓	
RAH																			

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 7-17-23 Time: 1405	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By:	Date:	Received By:	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 4.6 Corrected Temp. °C	Sample Condition Cool Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	Turnaround Time: Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Thermometer ID #443 #44024 hr Correction Factor 0.6°C 7/17/23
		CHECKED BY: (Initials) YO	Bacteria (only) Sample Condition Cool Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No

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



APPENDIX D

NMOCD Notifications

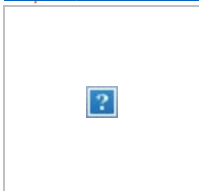
From: [Enviro, OCD, EMNRD](#)
To: [Kalei Jennings](#)
Cc: [Bratcher, Michael, EMNRD](#); [Nobui, Jennifer, EMNRD](#)
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 12/19/2022)
Date: Wednesday, December 14, 2022 4:43:00 PM
Attachments: [image005.jpg](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)

[**EXTERNAL EMAIL**]

Good afternoon 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.

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: Wednesday, December 14, 2022 3:21 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 12/19/2022)

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

All,

Maverick Natural Resources (Maverick) plans to complete final sampling activities at the following sites the week of December 19, 2022.

- Ruby Federal/ NAPP2231448981
- SEMU Eumont 117/ NAPP2231946665
- State F TG/ NAPP2233947938

Thank you,

From: [Enviro, OCD, EMNRD](#)
To: [Kalei Jennings](#)
Cc: [Bratcher, Michael, EMNRD](#); [Velez, Nelson, EMNRD](#)
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 7/10/2023)
Date: Monday, July 10, 2023 8:31:06 AM
Attachments: [image005.jpg](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)

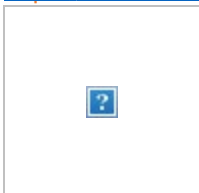
[**EXTERNAL EMAIL**]

Kalei,

Notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to ensure inclusion in the project file.

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>



From: Kalei Jennings <kjennings@ensolum.com>
Sent: Friday, July 7, 2023 4:14 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Aimee Cole <acole@ensolum.com>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 7/10/2023)

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

All,

Maverick Permian, LLC plans to complete sampling activities at the following site the week of July 10, 2023.

- MCA 204 / NAPP2311751602
 - Sampling Date: 7/10/2023 through 07/13/2023

- State F TG #001 / NAPP2233947938
 - Sampling Date: 7/12/2023 & 7/13/2023
- MCA 409 Flowline / NAPP2318846991
 - Sampling Date: 7/13/2023
- Encore M State #8 / NAPP2316640406
 - Sampling Date: 7/14/2023
- SEMU 37 / NAPP2316638385
 - Sampling Date: 7/14/2023

Thank you,



Kalei Jennings

Senior Scientist

817-683-2503

Ensolum, LLC



From: [Enviro, OCD, EMNRD](#)
To: [Kalei Jennings](#)
Cc: [Bratcher, Michael, EMNRD](#); [Velez, Nelson, EMNRD](#)
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 7/17/2023)
Date: Friday, July 14, 2023 7:42:46 AM
Attachments: [image005.jpg](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)

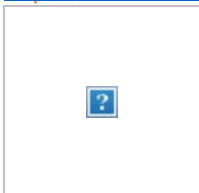
[**EXTERNAL EMAIL**]

Kalei,

Notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to ensure inclusion in the project file.

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, July 13, 2023 2:05 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Aimee Cole <acole@ensolum.com>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 7/17/2023)

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

All,

Maverick Permian, LLC plans to complete sampling activities at the following site the week of July 17, 2023.

- MCA 204 / NAPP2311751602
 - Sampling Date: 7/17/2023 through 07/19/2023

- State F TG #001 / NAPP2233947938
 - Sampling Date: 7/17/2023 & 7/18/2023
- MCA 409 Flowline / NAPP2318846991
 - Sampling Date: 7/17/2023
- SEMU 34 / NAPP2314257831
 - Sampling Date: 7/19/2023 & 7/20/2023

Thank you,



Kalei Jennings

Senior Scientist

817-683-2503

Ensolum, LLC





APPENDIX E

Final C-141

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NAPP2233947938
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) NAPP2233947938
Contact mailing address: 1410 NW County Road Hobbs, NM 88240	

Location of Release Source

Latitude 32.79316 _____ Longitude -103.61882 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name State F TG #001	Site Type
Date Release Discovered November 20, 2022	API# (if applicable) 30-025-01422

Unit Letter	Section	Township	Range	County
F	36	17S	33E	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)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 15 bbls	Volume Recovered (bbls) 10 bbls
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

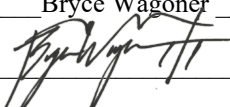
Pressure switch failed and oil pressured up causing a release on pad. A vacuum truck was dispatched to the site to recover free standing fluids and a backhoe removed saturated soils from the release area. The source of the release has been stopped and the impacted area has been secured. Initial response and removal of saturated soil from the release area has been completed.

Incident ID	NAPP2233947938
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> 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>11/30/2022</u>
email: <u>Bryce.Wagoner@mavresources.com</u>	Telephone: <u>928-241-1862</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

NAPP2233947938

Pooled Fluids on the Surface										
	Length (ft.)	Width (ft.)	Depth (in)	# of Boundaries <i>*edges of pool where depth is 0 . don't count shared boundaries</i>	Oil-Water Ratio (%)	Pooled Area (ft ²)	Estimated Average Depth (ft.)	Pooled Volume (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle B					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle C						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Volume (bbls):								0.00	0.00	0.00

Subsurface Fluids										
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) <i>*10% in consolidated sediments after rain to 50% in sand with no precipitation</i>	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	48.0	3.0	0.1	1.00	2880.0	128.2	10.3	10.25	0.0
Rectangle B	42.0	21.0	4.5	0.1	1.00	882.0	58.9	4.7	4.71	0.0
Rectangle C				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle D				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle E				0.1	0.01	0.0	0.0	0.0	0.00	0.0
Rectangle F						0.0	0.0	0.0	0.00	0.0
Rectangle G						0.0	0.0	0.0	0.00	0.0
Rectangle H						0.0	0.0	0.0	0.00	0.0
Rectangle I						0.0	0.0	0.0	0.00	0.0
Rectangle J						0.0	0.0	0.0	0.00	0.0
Total Volume (bbls):								14.96	14.96	0.00

TOTAL RELEASE VOLUME (bbls):	15.0
------------------------------	------

Incident ID	NAPP2233947938
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>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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

Incident ID	NAPP2233947938
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Bryce Wagoner Title: Permian HSE Specialist IISignature:  Date: 8/9/2023email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862**OCD Only**Received by: Shelly Wells Date: 8/10/2023

Incident ID	NAPP2233947938
District RP	
Facility ID	
Application ID	

Closure

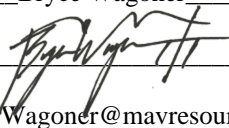
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled 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: 8/9/2023

email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Shelly Wells Date: 8/10/2023

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: Nelson Velez Date: 11/14/2023

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

District I
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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 250465

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 250465
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	11/14/2023