ENSOLUM

December 16, 2025

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

Re: Deferral Request Addendum
Warren Unit Battery #1 & SWD
Incident Number nAPP2500352359
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), has prepared the following *Deferral Request Addendum* for the Warren Unit Battery #1 & SWD (Site). This *Deferral Request Addendum* details additional delineation and excavation activities completed at the Site, in response to the denial of a previously submitted *Site Summary Letter and Deferral Request (Deferral Request)* by the New Mexico Oil Conservation Division (NMOCD). In the denial, NMOCD expressed concern that the delineation was insufficent. Based on the delineation sampling activities described below, Hilcorp is requesting no further remedial action for Incident Number nAPP2500352359.

BACKGROUND

The Site is located in Unit H, Section 33, Township 20 South, Range 38 East, in Lea County, New Mexico (32.530583°, -103.146738°) and is associated with oil and gas exploration and production operations on private land.

On January 3, 2025, a tank overflow resulted in the release of 800 barrels (bbls) of crude oil into a lined containment and onto the pad surface. A vacuum truck was dispatched and approximately 720 bbls of release fluids were recovered. A Notification of Release (NOR) was submitted on January 3, 2025 and subsequently an Initial C-141 Application (C-141) on January 8, 2025. The release was assigned Incident Number nAPP2500352359.

As documented in the *Deferral Request,* impacted soil was excavated from the release area as indicated by delineation soil sample laboratory analytical results. Following removal of impacted soil to the maximum extent practicable (MEP), Ensolum personnel collected 5-point composite soil samples representing no more than 200 square feet from the excavations (Figure 3). The impacted soil was transported and properly disposed of at the Sundance Disposal in Eunice, New Mexico. Approximately 717 cubic yards of impacted soils above the applicable NMOCD Table I Closure Criteria were left in place due to safety concerns and proximity to active oil and gas equipment.

The *Deferral Request* was submitted on April 3, 2025, to the NMOCD. On June 18, 2025, NMOCD denied the *Deferral Request* for Incident Number nAPP2500352359 for the following reasons:

Deferral request is denied for the following reasons; 1. The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. 2. Did not fully delineate the entire release. 3. Did not identified SS01 and SS01A on either Figure 2 or Figure 3. 4. Have not clearly shown which area(s) to be deferred (e.g.: photo documentation or representative on site map). 5. Hilcorp has 90-days (September 15, 2025) to submit its appropriate or final remediation closure report.

The *Deferral Request* detailed Site characterization according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, (19.15.29) of the New Mexico Administrative Code (NMAC). The Site characterization results were included in the previously submitted *Deferral Request* prepared for Incident Number nAPP2500352359. On January 17, 2025, Ensolum requested a Closure Criteria variance from the NMOCD via email. On the same day, the NMOCD approved the Closure Criteria variance to apply the Table I Closure Criteria of groundwater greater than 51 feet and less than 100 feet below ground surface (bgs). A copy of the correspondence is included in Appendix A.

Based on the results of the Site characterization and approved NMOCD variance, the following NMOCD Table I Closure Criteria applied:

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

ADDITIONAL DELINEATION AND EXCAVATION

Between September 17, 2025 and October 10, 2025, Ensolum personnel were at the Site to conduct additional delineation activities. Eleven delineation boreholes, BH05 through BH15, were collected from depths ranging from 0.5 feet to 13 feet bgs. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. The delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Field screening results and observations for the pothole were logged on a lithologic soil sampling log, which is included in Appendix B. Photographic documentation is included in Appendix C of the additional and all previous remediation activities.

In addition, Ensolum personnel were at the Site to oversee additional excavation activities to the MEP. Once impacted soil was removed to the MEP, 5-point composite soil samples were collected every 200 square feet from the floors and the sidewalls of the excavation extents. Excavation floor soil samples FS14 through FS20 were collected from the floors of the excavations at depths ranging from 1-foot bgs to 5 feet bgs. Excavation sidewall soil samples SW12 and SW19 were collected from the sidewalls of the excavations at depths ranging from the ground surface to 5 feet bgs. Confirmation soil sample CS01

was collected from the surface scrape extent at a depth of 0.5 feet bgs. All confirmation soil sample locations are depicted on Figure 3.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico or Eurofins Laboratory (Eurofins) in Carlsbad, New Mexico, for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method SM4500 or EPA method 300.0.

The excavation extent completed to date measured approximately 4,150 square feet and approximately 525 cubic yards of impacted soil were removed. The impacted soil was transported and properly disposed of at the Sundance Disposal Facility located in Eunice, New Mexico. The excavation has been backfilled with material purchased locally and the area was recontoured to match pre-existing Site conditions. Two representative 5-point composite samples were collected. Backfill soil sample BF01 was collected from the topsoil backfill material on October 8, 2025 and BF02 was collected from the imported caliche backfill material on October 10, 2025. The backfill soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratory (Eurofins) in Carlsbad, New Mexico and analyzed for the same COCs with the exception of chloride which was analyzed utilizing EPA method 300.0.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the additional delineation soil samples indicated all COCs were in compliance with Site Closure Criteria with the exception of BH05 and BH12. Laboratory analytical results for delineation soil sample BH05 indicated TPH concentrations exceeded Closure Criteria at 1-foot bgs but was in compliance at 3 feet bgs. Delineation soil samples BH12 indicated TPH concentrations exceeded Closure Criteria at depths of 0.5 feet, 8.0 feet and 12 feet bgs but was in compliance at 13 feet bgs. The laboratory analytical results are summarized in Table 1 including all previous soil sample laboratory analytical results. The soil sample laboratory analytical reports are included in Appendix D.

DEFERRAL REQUEST

Additional delineation and excavation activities were conducted at the Site in response to the June 18, 2025 NMOCD denial. All soil samples that established the lateral and vertical extent of the requested area of deferral are depicted on Figure 4 and are summarized in Table 1. Hilcorp is requesting deferral of final remediation due to the presence of active production equipment, flowlines, process piping, containment area, production tanks, and production equipment preventing excavation of impacted soil in the vicinity of BH05, BH12, and BH13. The impacted soil is limited to the area surrounding active production equipment, where remediation would require a major facility deconstruction and safety concerns. The impacted soil remaining in place is delineated vertically by soil sample BH05, BH12, and BH13, collected at 3 feet, 13 feet, and 1-foot bgs, respectively. The soil is laterally defined by soil samples BH01 through BH04, BH06, BH07, BH10, BH11, BH14, BH15, SW03, SW04, SW07, SW09, SW10, SW13, SW 14, SW16 and PH03. The estimated areas of impacted soil left in place immediately adjacent to active production equipment measures approximately 4,527 square feet and a total of approximately 1,595 cubic yards of impacted soil remains in place.

Hilcorp does not believe deferral will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was determined to be between 51 feet and 100 feet bgs. Gross impacts were removed during excavation activities and the impacted soil remaining in place is limited in areal and vertical extent.

Based on the presence of active production equipment within the release area and the complete lateral and vertical delineation of impacted soil remaining in place, Hilcorp requests deferral of final remediation for Incident Number nAPP2500352359 until final reclamation of the well pad or major construction, whichever comes first.

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

Sincerely,
Ensolum, LLC

Tracy Hillard
Project Engineer

Kalei Jennings
Senior Managing Scientist

cc: Billy Ginn, Hilcorp

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Confirmation Soil Sample Locations
Figure 4	Requested Area of Deferral
Table 1	Soil Sample Analytical Results
Appendix A	Site Characterization Documentation
Appendix B	Lithologic Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Correspondence

Attachment I *Site Summary Letter & Deferral Request;* dated April 3, 2025

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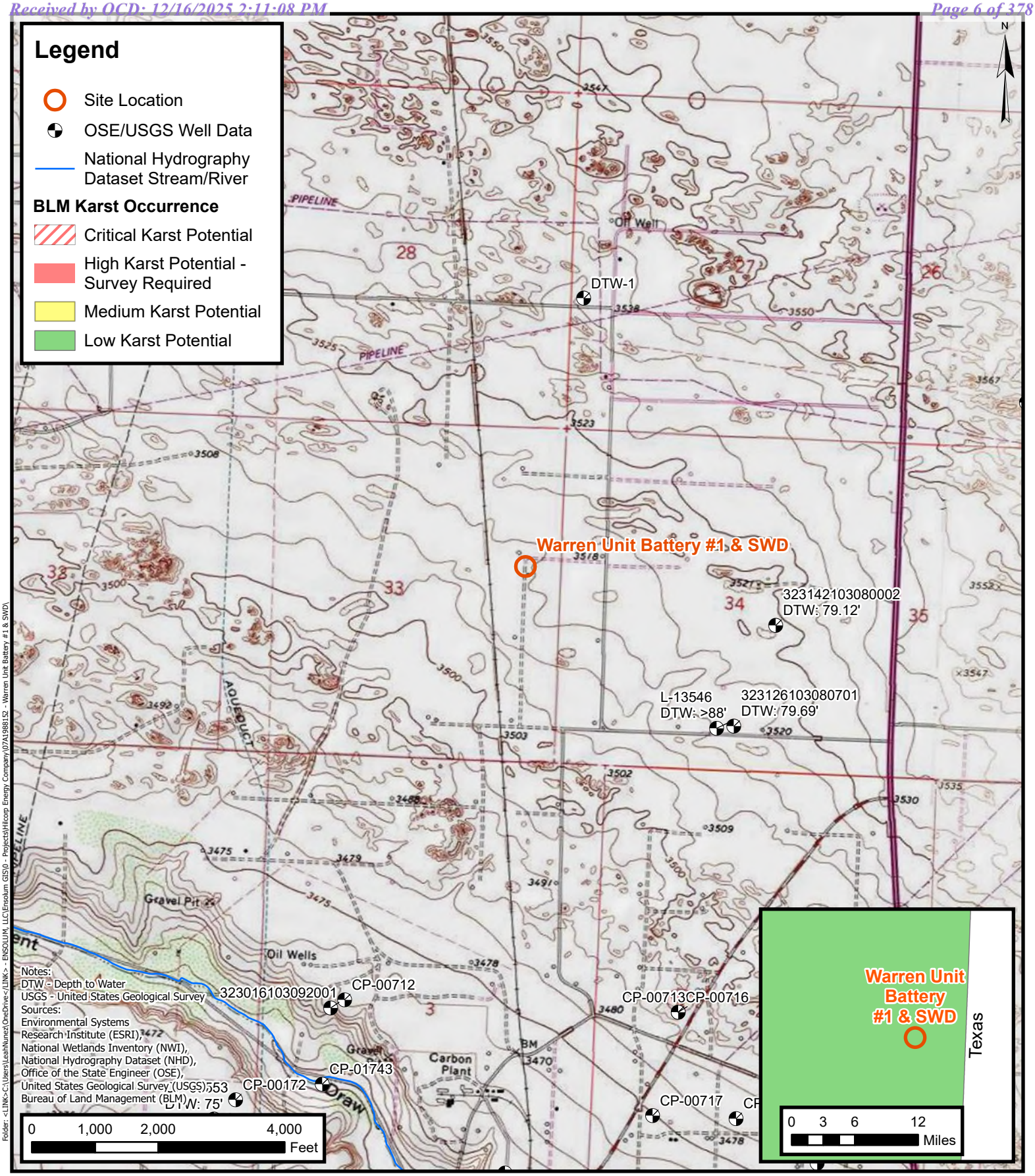
FIGURES



Folder: <LINK>C:\Users\LeahNunez\OneDrive</LINK> - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Hilcorp Energy Company\07A198815Z - Warren Unit Battery #1 & SWD\

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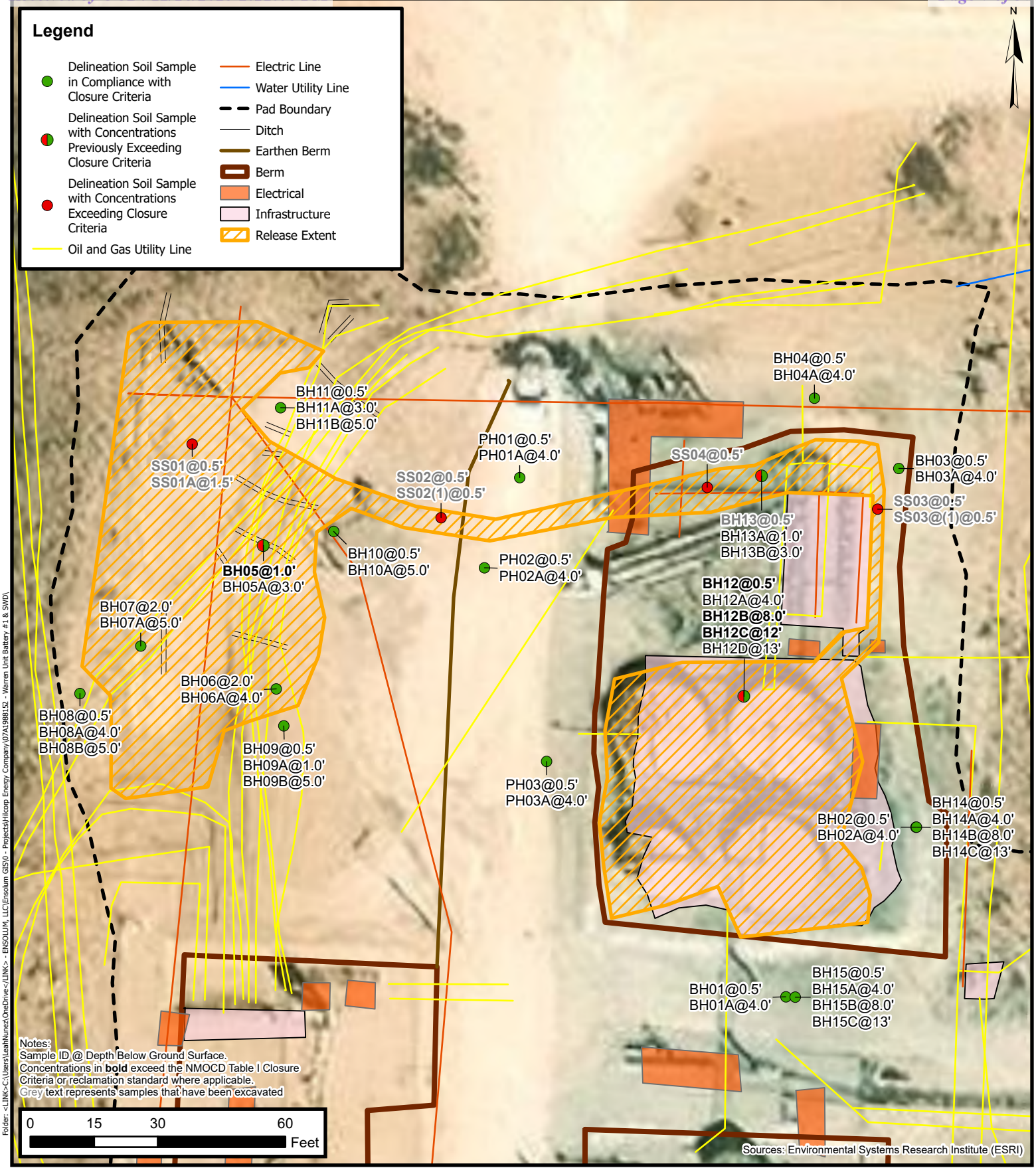
Site Receptor Map

Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Incident Number: nAPP2500352359
Unit H, Sec 33, T 20S, R 38E
Lea County, New Mexico

FIGURE 1



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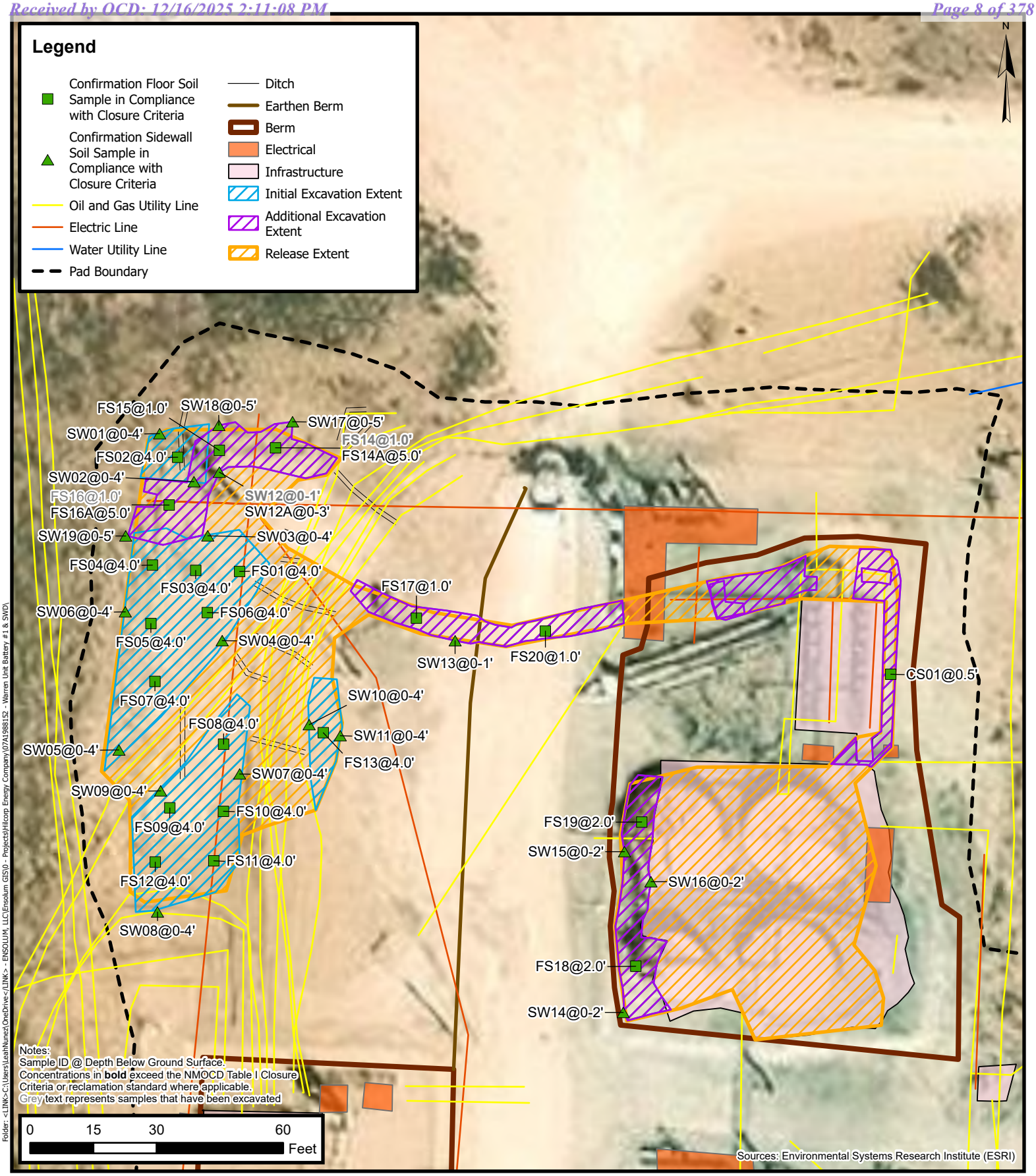
Delineation Soil Sample Locations

Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Incident Number: nAPP2500352359
Unit H, Sec 33, T 20S, R 38E
Lea County, New Mexico

FIGURE 2



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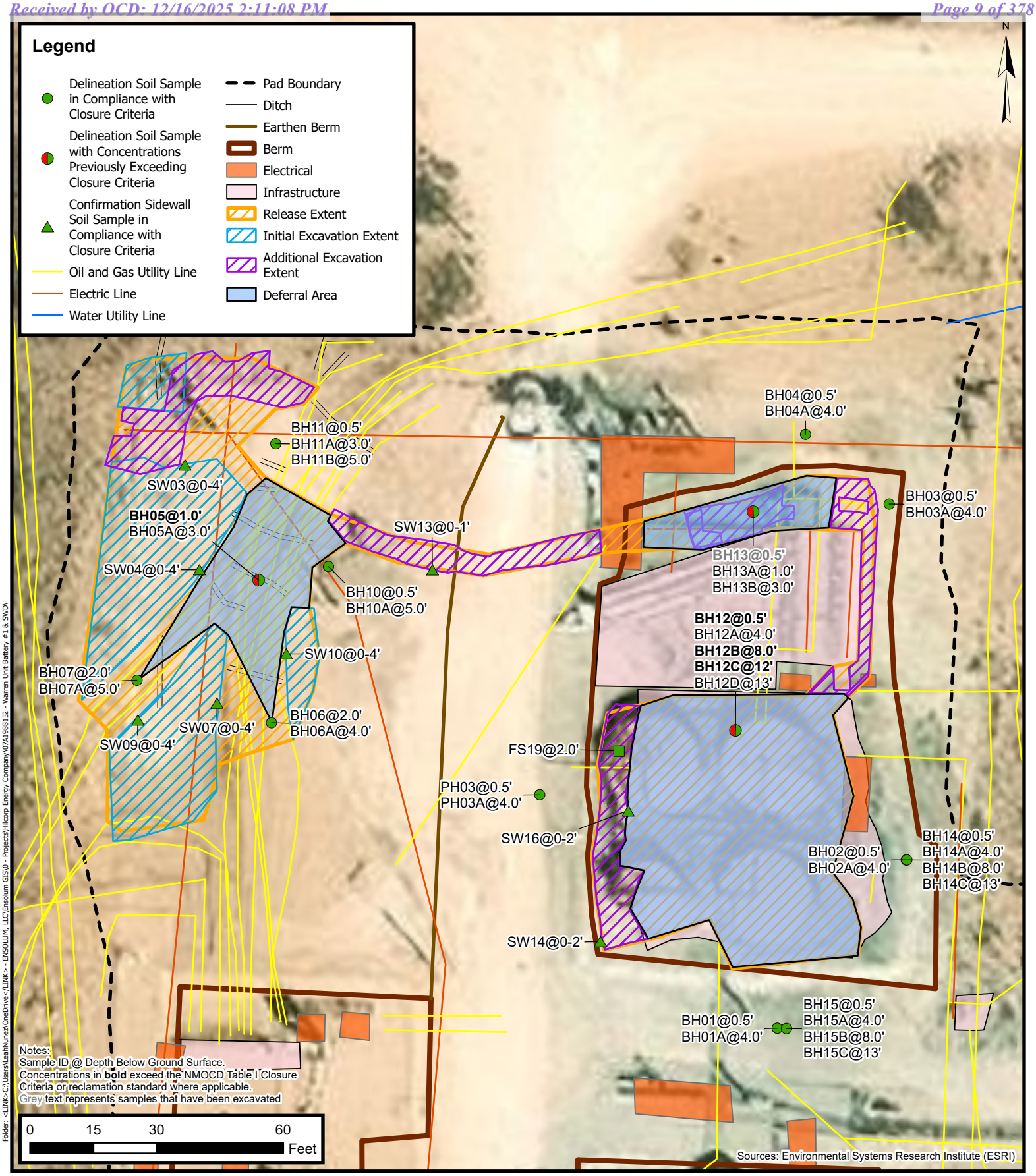
Confirmation Soil Sample Locations

Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Incident Number: nAPP2500352359
Unit H, Sec 33, T 20S, R 38E
Lea County, New Mexico

FIGURE 3



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Requested Area of Deferral

Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Incident Number: nAPP2500352359
Unit H, Sec 33, T 20S, R 38E
Lea County, New Mexico

FIGURE 4

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Warren Unit Battery #1 & SWD
Hilcorp Energy Company
nAPP2500352359
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Assessment Soil Samples										
SS01	01/07/2025	0.5	**13.0**	**367**	4,210	5,720	<49.6	**9,930**	**9,930**	870
SS01A	01/07/2025	1.5	2.29	**87.1**	125	513	<49.6	638	638	1,420
SS02	01/07/2025	0.5	**13.2**	**278**	7,670	18,500	<997	**26,170**	**26,200**	794
SS02 (1)	02/24/2025	0.5	<0.101	32.8	<995	11,900	<995	**11,900**	**11,900**	623
SS03	01/07/2025	0.5	**35.6**	**488**	15,400	22,000	<998	**37,400**	**37,400**	886
SS03 (1)	02/24/2025	0.5	0.126	17.3	<999	12,700	<999	**12,700**	**12,700**	3,110
SS04	02/24/2025	0.5	7.23	**246**	3,610	7,040	<995	**10,650**	**10,700**	992
Delineation Soil Samples										
BH01	01/29/2025	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<10.1
BH01A	01/29/2025	4.0	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	<10.1
BH02	01/29/2025	0.5	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	<10.1
BH02A	01/29/2025	4.0	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	<10.1
BH03	01/29/2025	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	<9.98
BH03A	01/29/2025	4.0	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<9.96
BH04	01/29/2025	0.5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	<9.94
BH04A	01/29/2025	4.0	<0.00198	<0.00397	<49.7	<49.7	<49.7	<49.7	<49.7	<9.98
BH05	09/17/2025	1.0	<0.100	27.5	1,610	14,200	1,850	**15,810**	**17,660**	<16.0
BH05A	09/17/2025	3.0	<0.050	<0.300	<10.0	15.9	<10.0	15.9	15.9	16.0
BH06	09/17/2025	2.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
BH06A	09/17/2025	4.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
BH07	09/17/2025	2.0	<0.050	0.730	40.6	678	95.9	719	815	352
BH07A	09/17/2025	5.0	<0.050	<0.300	<10.0	12.1	<10.0	12.1	12.1	352

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NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
BH08	09/18/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
BH08A	09/18/2025	4.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH08B	09/18/2025	5.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
BH09	09/19/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
BH09A	09/19/2025	1.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
BH09B	09/19/2025	5.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
BH10	09/22/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
BH10A	09/22/2025	5.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
BH11	09/25/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
BH11A	09/25/2025	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
BH11B	09/25/2025	5.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
BH12	10/08/2025	0.5	<0.050	<0.300	<10.0	1,840	597	**1,840**	2,437	32.0
BH12A	10/08/2025	4.0	<0.050	<0.300	<10.0	84.0	52.1	84.0	136	64.0
BH12B	10/08/2025	8.0	<0.050	<0.300	<10.0	1,050	313	**1,050**	1,363	816
BH12C	10/08/2025	12	<0.200	43.2	1,030	3,870	428	**4,900**	**5,328**	432
BH12D	10/08/2025	13	<0.050	<0.300	<10.0	138	35.5	138	174	368
BH13	10/08/2025	0.5	<0.050	<0.300	<10.0	1,930	437	**1,930**	2,367	128
BH13A	10/08/2025	1.0	<0.050	<0.300	<10.0	941	553	941	1,494	48.0
BH13B	10/08/2025	3.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
BH14	10/10/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
BH14A	10/10/2025	4.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
BH14B	10/10/2025	8.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
BH14C	10/10/2025	13	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144

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Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
BH15	10/10/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
BH15A	10/10/2025	4.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH15B	10/10/2025	8.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH15C	10/10/2025	13	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
PH01	01/29/2025	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<9.96
PH01A	01/29/2025	4.0	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	<9.92
PH02	01/29/2025	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	<10.0
PH02A	01/29/2025	4.0	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	<9.94
PH03	01/29/2025	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	<9.92
PH03A	01/29/2025	4.0	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	<10.1
Excavation Floor Soil Samples										
FS01	01/23/2025	4.0	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	75.4
FS02	01/28/2025	4.0	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	838
FS03	01/28/2025	4.0	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	287
FS04	01/28/2025	4.0	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,040
FS05	01/28/2025	4.0	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	673
FS06	01/28/2025	4.0	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	323
FS07	01/28/2025	4.0	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	593
FS08	01/28/2025	4.0	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	<9.96
FS09	01/28/2025	4.0	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	<9.90
FS10	01/28/2025	4.0	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	541
FS11	01/28/2025	4.0	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	<9.90
FS12	01/28/2025	4.0	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	<10.1
FS13	01/29/2025	4.0	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<10.0

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NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
FS14	09/17/2025	1.0	<0.050	<0.300	53.7	1,290	237	**1,344**	1,581	64.0
FS14A	09/24/2025	5.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320
FS15	09/17/2025	1.0	<0.050	<0.300	<10.0	171	37.6	171	209	32.0
FS16	09/17/2025	1.0	<0.050	<0.300	146	3,710	954	**3,860**	**4,810**	64.0
FS16A	09/24/2025	5.0	<0.050	<0.300	<10.0	98.0	11.2	98.0	109	336
FS17	09/22/2025	1.0	<0.050	<0.300	<10.0	123	<10.0	123	123	32.0
FS18	09/24/2025	2.0	<0.050	<0.300	<10.0	517	79.0	517	596	176
FS19	09/24/2025	2.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
FS20	10/08/2025	1.0	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
Excavation Sidewall Soil Samples										
SW01	01/28/2025	0 - 4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	<9.92
SW02	01/28/2025	0 - 4	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	2,090
SW03	01/28/2025	0 - 4	<0.00201	<0.00402	<49.8	59.0	<49.8	59.0	59.0	1,030
SW04	01/28/2025	0 - 4	<0.00200	0.00574	<49.9	112	<49.9	112	112	565
SW05	01/28/2025	0 - 4	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	1,210
SW06	01/28/2025	0 - 4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	84.7
SW07	01/28/2025	0 - 4	<0.00200	<0.00399	<49.9	191	<49.9	191	191	<9.94
SW08	01/28/2025	0 - 4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	<9.98
SW09	01/28/2025	0 - 4	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	43.6
SW10	01/29/2025	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<9.92
SW11	01/29/2025	0 - 4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<10.0
SW12	09/17/2025	0 - 1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SW12A	09/25/2025	0 - 3	<0.050	<0.300	<10.0	442	116	442	558	64.0
SW13	09/22/2025	0 - 1	<0.050	<0.300	<10.0	334	74.7	334	409	64.0
SW14	09/24/2025	0 - 2	<0.050	<0.300	<10.0	154	23.7	154	178	48.0

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Warren Unit Battery #1 & SWD
Hilcorp Energy Company
nAPP2500352359
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**10,000**
SW15	09/24/2025	0 - 2	<0.050	<0.300	<10.0	189	33.1	189	222	432
SW16	09/24/2025	0 - 2	<0.050	<0.300	<10.0	53.6	<10.0	53.6	53.6	208
SW17	09/25/2025	0 - 5	<0.050	<0.300	<10.0	136	24.9	136	161	64.0
SW18	09/25/2025	0 - 5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SW19	09/25/2025	0 - 5	<0.050	<0.300	<10.0	414	85.0	414	499	176
Confirmation Soil Samples										
CS01	10/09/2025	0.5	<0.050	<0.300	<10.0	612	86.1	612	698	224
Backfill Soil Samples										
BF01	10/08/2025	NA	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
BF02	10/10/2025	NA	<0.050	<0.300	<10.0	31.1	17.8	31.1	48.9	48.0

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
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.*
Grey text represents samples that have been excavated
NE: Not Established

ENSOLUM

APPENDIX A

Site Characterization Documentation

From: Velez, Nelson, EMNRD
To: Stuart Hyde
Cc: Billy Ginn; Fatima Smith; Devin Hencmann; Enviro, OCD, EMNRD
Subject: Re: [EXTERNAL] nAPP2500352359 - Warren Unit Battery #1 & SWD Closure Criteria
Date: Friday, January 17, 2025 2:33:49 PM
Attachments: image001.png
image002.png
image003.png
Outlook-yruua5sa.png

[**EXTERNAL EMAIL**]
Good afternoon Stuart,

Thank you for your inquiry. I do concur with your evaluation for the depth of water estimation and using the applicable Table I Closure Criteria of Groundwater 51-100 feet below grade.

Regards,

Nelson Velez ● **Environmental Specialist - Adv**
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Stuart Hyde <shyde@ensolum.com>
Sent: Friday, January 17, 2025 11:06 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Devin Hencmann <dhencmann@ensolum.com>; Fatima Smith <fsmith@ensolum.com>; Billy Ginn <William.Ginn@hilcorp.com>
Subject: [EXTERNAL] nAPP2500352359 - Warren Unit Battery #1 & SWD Closure Criteria

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

Nelson,

We are assisting Hilcorp with the Warren Unit Battery #1 & SWD site, Incident ID nAPP2500352359. Hilcorp is currently spotting utilities with a hydrovac this week and will be conducting excavation and sampling work next week, likely starting Monday. To guide the excavation effort, we would like to

get the NMOCD's concurrence on the Table I Closure Criteria. We have prepared the attached site characterization spreadsheet outlining the nearby sensitive receptors and figures showing the site location.

Please reach out if you have any questions regarding the presented information and/or site. Thanks so much and have a good weekend.

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): MW-1	OSE FILE NUMBER(S): L-13546
WELL OWNER NAME(S): Conoco Phillips	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: HC 60, Box 66	CITY: Lovington STATE: NM ZIP: 88260

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	31	25.98	N
LONGITUDE	103	8	11.85	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE: Warren Unit 13

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1456	John W. White	White Drilling Company, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
6/17/2014	6/17/2014	88.0		72.0

COMPLETED WELL IS: ( ) ARTESIAN ( ) DRY HOLE (•) SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): 75.88

DRILLING FLUID: (•) AIR ( ) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ( ) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0.0	56.0	6.0	Sch. 40 PVC	Threads	2.0	1/4"	
56.0	86.0	6.0	Sch. 40 PVC	Threads	2.0	1/4"	.010

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
52.0	88.0	6.0	20/40 Sand	12 Sacks	Hand Mix
52.0	48.0	6.0	Bentonite Chips	6 Sacks	Hand Mix
48.0	8.0	6.0	Type 2 Portland Cement w/5% Bentonite	6.52 Gal.	Pump Mix w/Tremm
8.0	0.0	6.0	Cement	1.5976	Pump Mix w/Tremm

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

543306

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0.0	14.0	14.0	Light Brown Sand	○ Y ◉ N	
14.0	23.0	9.0	Yellowish & whiteish layers of tight packed sand	○ Y ◉ N	
23.0	47.0	24.0	Pinkish brown sand	○ Y ◉ N	
47.0	73.0	26.0	Reddish brown sand/sandstone	○ Y ◉ N	
73.0	88.0	15.0	Reddish sandy shale/clay	◉ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

William B. Atkins

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

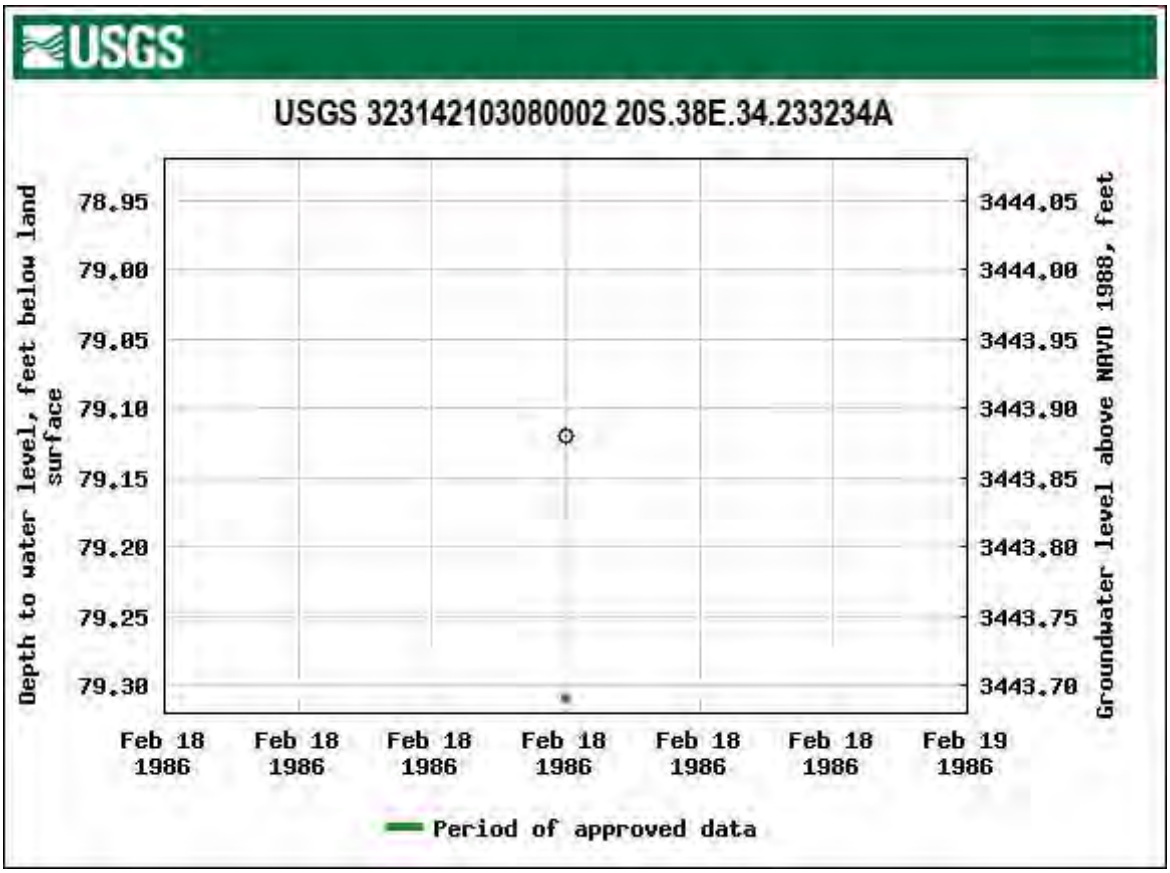
SIGNATURE OF DRILLER / PRINT SIGNEE NAME

7-1-14
DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2


USGS
USGS 323142103080002 20S.38E.34.233234A
Depth to water level, feet below land surface
78.95
79.00
79.05
79.10
79.15
79.20
79.25
79.30
Groundwater level above NAVD 1988, feet
3444.05
3444.00
3443.95
3443.90
3443.85
3443.80
3443.75
3443.70
Feb 18 1986
Feb 18 1986
Feb 18 1986
Feb 18 1986
Feb 18 1986
Feb 18 1986
Feb 19 1986
Period of approved data

ENSOLUM

APPENDIX B

Lithologic Soil Sampling Logs

ENSOLUM

Sample Name: BH01	Date: 1/29/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman / Method: Hand auger
Coordinates: 32.5304637, -103.1466996	Hole Diameter: 3 in / Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<168	0.0	N	BH01	0.5	0	SP	Very fine grained, light tan sand w/some silt. Poorly graded. ML. No stain. No odor.
						1		
						2		
						3		
Dry	<168	0.0	N	BH01A	4	4		SAA
								Total Depth at 4 ft. bgs.

ENSOLUM

Sample Name: BH02	Date: 1/29/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman / Method: Hand auger
Coordinates: 32.5305765, -103.1466056	Hole Diameter: 3 in / Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<168	0.0	N	BH02	0.5	0	SP	Very fine grained, light tan sand w/some silt. Poorly graded. ML. No stain. No odor.
						1		
						2		
						3		
Dry	<168	0.0	N	BH02A	4	4		SAA
								Total depth at 4 ft bgs.

ENSOLUM

Sample Name: BH03	Date: 1/29/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman / Method: Hand auger
Coordinates: 32.5308075, -103.1466292	Hole Diameter: 3 in / Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<168	0.0	N	BH03	0.5	0	SP	Very fine grained, light tan sand w/some silt. Poorly graded. ML. No stain. No odor.
						1		
						2		
						3		
Dry	<168	0.0	N	BH03A	4	4		SAA
								Total depth at 4 ft bgs.

ENSOLUM

	Sample Name: BH04	Date: 1/29/2025
	Site Name: Warren Unit Battery #1 & SWD	
	Incident Number: nAPP2500352359	
	Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman	Method: Hand auger
Coordinates: 32.5308505, -103.1466955	Hole Diameter: 3 in	Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<168	0.0	N	BH04	0.5	0	SP	Very fine grained, light tan sand w/some silt. Poorly graded. ML. No stain. No odor.
						1		
						2		
						3		
Dry	<168	0.0	N	BH04A	4	4		SAA
								Total depth at 4 ft bgs.

ENSOLUM

	Sample Name: BH05	Date: 9/17/2025
	Site Name: Warren Unit Battery #1 & SWD	
	Incident Number: nAPP2500352359	
	Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell	Method: Hand auger
Coordinates: 32.5307420, -103.1471108	Hole Diameter: 4 in	Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP-SM	Light brown, fine-very fine grained sand, few silt. Poorly graded. No stain. No odor.
Dry	NA	225.9	N			0.5		
Dry	<168	485.6	N	BH05	1	1	SP	SAA, strong odor.
Dry	NA	152.6	N			2	SP	SAA, strong odor.
Dry	<168	31.3	N	BH05A	3	3	SP	SAA, light odor.
								Total depth at 3 ft bgs.

ENSOLUM

Sample Name: BH06	Date: 9/17/2025	
Site Name: Warren Unit Battery #1 & SWD		
Incident Number: nAPP2500352359		
Job Number: 07A1988152		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell	Method: Hand auger
Coordinates: 32.530650, -103.147097	Hole Diameter: 4 in	Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	NA	2.8	N			0.5	SP	Light brown, fine-very fine grained sand, few silt. Poorly graded. No stain. No odor.
Dry	NA	3.3	N			1	SP	SAA
Dry	<168	4.6	N	BH06	2	2	SP	SAA
Dry	NA	2.2	N			3	SP	SAA, very light brown.
Dry	<168	3.0	N	BH06A	4	4	SP	SAA, very light brown.
								Total depth at 4 ft bgs.

ENSOLUM

Sample Name: BH07	Date: 9/17/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell / Method: Hand auger
Coordinates: 32.530674, -103.147201	Hole Diameter: 4 in / Total Depth: 5 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	NA	3.8	Y			0	SP	Light brown, fine to very fine grained sand. Few silt. Poorly graded. ML. Stain. No odor.
Dry	NA	184.8	N			1	SP	SAA. Strong odor.
Dry	464.8	339.7	N	BH07	2	2	SP	SAA. Strong odor.
Dry	NA	101.7	N			3	SP	SAA. Strong odor.
Dry	NA	216.2	N			4	SP	SAA. Very light brown. Strong odor.
Dry	526.4	20.0	N	BH07A	5	5	SP	SAA. Very light brown. Strong odor.
								Total depth at 5 ft bgs.

ENSOLUM

Sample Name: BH08	Date: 9/18/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell / Method: Hand auger
Coordinates: 32.5306416, -103.1472462	Hole Diameter: 4 in / Total Depth: 5 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP	Light brown, fine to very fine grained sand. Few silt. Poorly graded. ML. No stain. No odor.
Dry	<168	0.5	N	BH08	0.5			
Dry	<168	0.7	N			1	SP	SAA
Dry	<168	0.6	N			2	SP	SAA
Dry	<168	1.7	N			3	SP	SAA
Dry	<168	2.1	N	BH08A	4	4	SP-SM	Very light brown sand. Little silt. Trace clay. Poorly graded. ML. No stain. No odor.
Dry	<168	0.9	N	BH08B	5	5	SP-SM	SAA
								Total depth at 5 ft bgs.

ENSOLUM

Sample Name: BH09	Date: 9/19/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell / Method: Hand auger
Coordinates: 32.5306253, -103.1470898	Hole Diameter: 4 in / Total Depth: 5 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP	Light brown, fine to very fine grained sand. Few silt. Poorly graded. ML.
Dry	<168	0.7	N	BH09	0.5			No stain. No odor.
Dry	<168	1.6	N	BH09A	1	1	SP	SAA. Petroflag result: 0.0 ppm
Dry	<168	1.5	N			2	SP	SAA
Dry	<168	1.0	N			3	SP	SAA
Dry	<168	1.0	N			4	SP-SM	Very light brown, fine to very fine grained sand. Little silt. Trace clay. Poorly graded. ML. No stain. No odor.
Dry	<168	1.1	N	BH09A	5	5	SP-SM	SAA
								Total depth at 5 ft bgs.

ENSOLUM

Sample Name: BH10	Date: 9/22/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell / Method: Hand auger
Coordinates: 32.5307532, -103.1470568	Hole Diameter: 4 in / Total Depth: 5 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<168	1.1	N	BH10	0.5	0	SP	Light brown, fine to very fine grained sand. Few silt. Poorly graded. ML. No stain. No odor. Petroflag result: 29 ppm
Dry	<168	0.8	N			1	SP	SAA
Dry	<168	0.7	N			2	SP	SAA
Dry	<168	0.8	N			3	SP	SAA
Dry	<168	0.2	N			4	SP-SM	Very light brown, fine to very fine grained sand. Little silt. Trace clay. Poorly graded. ML. No stain. No odor.
Dry	<168	0.3	N	BH10A	5	5	SP-SM	SAA
								Total depth at 5 ft bgs.

ENSOLUM

	Sample Name: BH11	Date: 9/25/2025
	Site Name: Warren Unit Battery #1 & SWD	
	Incident Number: nAPP2500352359	
	Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell	Method: Hand auger
Coordinates: 32.5308319, -103.1471019	Hole Diameter: 4 in	Total Depth: 5 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	Off-white caliche. Some gravel. Well graded. ML. No stain. No odor.
Dry	268.8	1.7	N	BH11	0.5			
Dry	268.8	1.8	N			1	CCHE	SAA
Dry	<168	2.0	N			2	SP	Light brown, fine to very fine grained sand. Trace silt. Poorly graded. ML. No stain. No odor.
Dry	<168	2.1	N	BH11A	3	3	SP	SAA
Dry	<168	2.0	N			4	SP	Very light brown, fine to very fine grained sand. Few silt. Poorly graded. ML. No stain. No odor.
Dry	<168	1.9	N	BH11B	5	5	SP	SAA
								Total depth at 5 ft bgs.

ENSOLUM

Sample Name: BH12	Date: 10/8/2025	
Site Name: Warren Unit Battery #1 & SWD		
Incident Number: nAPP2500352359		
Job Number: 07A1988152		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell	Method: Hand auger
Coordinates: 32.5306564, -103.1467405	Hole Diameter: 4 in	Total Depth: 13 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	Off-white caliche. Some gravel. Well graded.
Dry	<168	0.0	Y	BH12	0.5			ML. Black stain. Odor.
Dry	<168	0.0	N			1	CCHE	SAA. No stain. No odor.
Dry	<168	0.0	N			2	CCHE	SAA. No stain. No odor.
Dry	<168	0.0	N			3	SP	Dark brown, fine sand. Poorly graded. ML. No stain. No odor. Total TPH-Petroflag result: >1000 ppm
Dry	<168	0.0	N	BH12A	4	4	SP	Light brown, Fine sand. Poorly graded. ML. No stain. No odor. Total TPH-Petroflag result: 843 ppm
Dry	<168	0.2	N			5	SP-SM	Light brown, very fine sand. Poorly graded. ML. No stain. No odor. Total TPH-Petroflag result: 962
Dry	414.4	0.3	N			6	SP-SM	SAA
Dry	464.8	2.5	Y			7	SP-SM	SAA. Light yellow-brown. Yellow stain. Odor.
Dry	1,170	43.8	Y	BH12B	8	8	SP-SM	SAA. Light brown to gray/black. Gray/black stain. Odor.
Dry	NA	1,381	Y			9	SP-SM	SAA. Gray. Gray stain. Odor.
Dry	NA	1,034	Y			10	SP-SM	SAA
Dry	NA	1,583	Y			11	SP-SM	SAA
Dry	576.8	1,547	Y	BH12C	12	12	SP-SM	SAA

ENSOLUM

Sample Name: BH12	Date: 10/8/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell / Method: Hand auger
Coordinates: 32.5306564, -103.1467405	Hole Diameter: 4 in / Total Depth: 13 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	364	100.4	Y	BH12D	13	13	SM	Red brown-gray silt w some fine sand. Poorly graded. ML. Stain. Odor.
								Total depth at 13 ft bgs.

ENSOLUM

Sample Name: BH13	Date: 10/8/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Alex Ferrell	Method: Hand auger	
Coordinates: 32.5307988, -103.1467333	Hole Diameter: 4 in	Total Depth: 3 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	<168	1.9	Y	BH13	0.5		CCHE	Off-white. Well graded. ML. Stain. No odor.
Dry	<168	0.1	Y	BH13A	1	1	SP	Brown, fine grained sand. Trace silt. Poorly graded. ML. Stain. No odor. Total TPH-Petroflag result: >1000 ppm
Dry	<168	0.0	Y			2	SP	SAA Total TPH-Petroflag result: >1000 ppm
Dry	<168	0.3	N	BH13B	3	3	SP	SAA. Light brown. Total TPH-Petroflag result: 18 ppm
								Total depth at 3 ft bgs.

ENSOLUM

	Sample Name: BH14	Date: 10/10/2025
	Site Name: Warren Unit Battery #1 & SWD	
	Incident Number: nAPP2500352359	
	Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell	Method: Hand auger
Coordinates: 32.530577, -103.146605	Hole Diameter: 4 in	Total Depth: 13 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP	Light brown, fine grained sand. Few silt. Poorly graded. ML. No stain. No odor.
Dry	274.4	0	N	BH14	0.5			Total TPH-Petroflag result: 83 ppm
Dry	274.4	1.3	N			2	SP	SAA
Dry	162.4	1.2	N	BH14A	4	4	SP	SAA
Dry	<168	1.4	N			6	SP	Very light brown, fine grained sand. Few silt. Poorly graded. ML. No stain. No odor.
Dry	<168	2.1	N	BH14B	8	8	SP-SM	Light brown to very light brown. Fine grained sand. Little silt. Poorly graded. ML. No stain. No odor.
Dry	<168	1.5	N			10	SP-SM	SAA. Few clay.
Dry	<168	1.4	N			12	SP-SM	Very light brown-orange brown. Little silt. Few clay. Poorly graded. ML. No stain. No odor.
Dry	<168	1.0	N	BH14C	13	13	SP-SM	SAA
								Total depth at 13 ft bgs.

ENSOLUM

	Sample Name: BH15	Date: 10/10/2025
	Site Name: Warren Unit Battery #1 & SWD	
	Incident Number: nAPP2500352359	
	Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Alex Ferrell	Method: Hand auger
Coordinates: 32.5304636, -103.1466922	Hole Diameter: 4 in	Total Depth: 13 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	Off-white. Well graded. ML. Stain. No odor. Total TPH-Petroflag result: 42 ppm
Dry	<168	0	N	BH15	0.5			
Moist	<168	0.9	N			2	SP	Light brown, fine grained sand. Few silt. Poorly graded.
Moist	<168	1.5	N	BH15A	4	4	SP	SAA
Dry	<168	1.4	N			6	SP	SAA. Very light brown.
Dry	<168	1.7	N	BH15B	8	8	SP-SM	SAA. Little silt.
Dry	<168	1.7	N			10	SP-SM	SAA. Very light brown-light brown. Little silt.
Dry	<168	1.2	N			12	SM	Light orange brown-very light brown. Some silt. Few clay. No stain. No odor.
Dry	<168	1.1	N	BH15C	13	13	SM	SAA
								Total depth at 13 ft bgs.

ENSOLUM

Sample Name: PH01	Date: 1/29/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Connor Whitman	Method: Hand auger
Coordinates: 32.5307918, -103.1469178	Hole Diameter: 3 in / Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<168	0.0	N	PH01	0.5	0	CCHE	Tan, sandy, gravely. Well graded. ML. No stain. No odor.
						1		
						2		
						3		
Dry	<168	0.0	N	PH01A	4	4	SP	Very fine grained, light tan sand w/some silt. Poorly graded. ML. No stain. No odor. Total depth at 4 ft bgs.

ENSOLUM

	Sample Name: PH02	Date: 1/29/2025
	Site Name: Warren Unit Battery #1 & SWD	
	Incident Number: nAPP2500352359	
	Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman	Method: Hand auger
Coordinates: 32.5307327, -103.1469418	Hole Diameter: 3 in	Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<168	0.0	N	PH02	0.5	0	CCHE	Tan, sandy, gravely. Well graded. ML. No stain. No odor.
						1		
						2		
						3		
Dry	<168	0.0	N	PH0A2	4	4	SP	Very fine grained, light tan sand w/some silt. Poorly graded. ML. No stain. No odor. Total depth at 4 ft bgs.

ENSOLUM

Sample Name: PH03	Date: 1/29/2025
Site Name: Warren Unit Battery #1 & SWD	
Incident Number: nAPP2500352359	
Job Number: 07A1988152	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman / Method: Hand auger
Coordinates: 32.5306096, -103.1468886	Hole Diameter: 3 in / Total Depth: 4 ft

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. +40% correction factors included for all chlroide screenings.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<168	0.0	N	PH03	0.5	0 1 2 3	CCHE	Tan, sandy, gravely. Well graded. ML. No stain. No odor.
Dry	<168	0.0	N	PH03A	4	4	SP	Very fine grained, light tan sand w/some silt. Poorly graded. ML. No stain. No odor. Total depth at 4 ft bgs.

ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Lea County, New Mexico

Photograph: 1 Date: 09/2/2025
Description: Site assessment activities
View: Northwest

Photograph: 2 Date: 09/2/2025
Description: Site assessment activities
View: Northeast

Photograph: 3 Date: 09/10/2025
Description: Site assessment activities
View: West

Photograph: 4 Date: 09/10/2025
Description: Site assessment activities
View: North

ENSOLUM

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Lea County, New Mexico

Photograph: 5 Date: 09/17/2025
Description: Delineation activities; near BH05
View: Northeast

Photograph: 6 Date: 09/17/2025
Description: Delineation activities; near BH06
View: South

Photograph: 7 Date: 09/18/2025
Description: Delineation activities; near BH08
View: South

Photograph: 8 Date: 09/18/2025
Description: Delineation activities; near BH10
View: Northwest

ENSOLUM

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Lea County, New Mexico

Photograph: 9 Date: 09/22/2025
Description: Excavation activities
View: West

Photograph: 10 Date: 09/23/2025
Description: Excavation activities
View: North

Photograph: 11 Date: 09/24/2025
Description: Excavation activities
View: Northwest

Photograph: 12 Date: 09/25/2025
Description: Excavation activities
View: Southwest

ENSOLUM

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Lea County, New Mexico

Photograph: 13 Date: 10/08/2025
Description: Backfill activities
View: West

Photograph: 14 Date: 10/08/2025
Description: Delineation activities; near BH12
View: Southeast

Photograph: 15 Date: 10/09/2025
Description: Backfill activities
View: Southeast

Photograph: 16 Date: 10/9/2025
Description: Backfill activities
View: North

ENSOLUM

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 & SWD
Lea County, New Mexico

Photograph: 17 Date: 10/10/2025
Description: Delineation activities; near BH15
View: Northeast

Photograph: 18 Date: 10/10/2025
Description: Delineation activities; near BH15
View: West

Photograph: 19 Date: 10/10/2025
Description: Backfill activities
View: Southwest

Photograph: 20 Date: 10/10/2025
Description: Backfill activities
View: Northwest

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

September 29, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/18/25 13:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 29-Sep-25 14:51

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS 14 1'	H255835-01	Soil	17-Sep-25 15:45	18-Sep-25 13:15
FS 15 1'	H255835-02	Soil	17-Sep-25 15:49	18-Sep-25 13:15
FS 16 1'	H255835-03	Soil	17-Sep-25 15:53	18-Sep-25 13:15
SW 12 0-1'	H255835-04	Soil	17-Sep-25 15:57	18-Sep-25 13:15

09/29/25 - Client changed the sample IDs on -01, -02 and -03 (see COC). This is the revised report and will replace the one sent on 09/23/25.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 29-Sep-25 14:51

FS 14 1'

H255835-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**64.0**		16.0	mg/kg	4	5091909	HM	19-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	QR-03
Toluene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	GC-NC, QR-03
Ethylbenzene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	QR-03
Total Xylenes*	<0.150		0.150	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*70.4-141*		*5091847*	JH	*19-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	**53.7**		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	
DRO >C10-C28*	**1290**		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	QM-07
EXT DRO >C28-C36	**237**		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*98.8 %*	*52.4-130*		*5091904*	MS	*19-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*114 %*	*39.9-141*		*5091904*	MS	*19-Sep-25*	*8015B*	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 29-Sep-25 14:51

FS 15 1'

H255835-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**32.0**		16.0	mg/kg	4	5091909	HM	19-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*106 %*	*70.4-141*		*5091847*	JH	*19-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	
DRO >C10-C28*	**171**		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	
EXT DRO >C28-C36	**37.6**		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*107 %*	*52.4-130*		*5091904*	MS	*19-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*105 %*	*39.9-141*		*5091904*	MS	*19-Sep-25*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 29-Sep-25 14:51

FS 16 1'

H255835-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**64.0**		16.0	mg/kg	4	5091909	HM	19-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	GC-NC
Ethylbenzene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*125 %*	*70.4-141*		*5091847*	JH	*19-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										**S-06**
GRO C6-C10*	**146**		50.0	mg/kg	5	5091904	MS	19-Sep-25	8015B	
DRO >C10-C28*	**3710**		50.0	mg/kg	5	5091904	MS	19-Sep-25	8015B	
EXT DRO >C28-C36	**954**		50.0	mg/kg	5	5091904	MS	19-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*110 %*	*52.4-130*		*5091904*	MS	*19-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*186 %*	*39.9-141*		*5091904*	MS	*19-Sep-25*	*8015B*	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 29-Sep-25 14:51

SW 12 0-1'

H255835-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**32.0**		16.0	mg/kg	4	5091909	HM	19-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5091847	JH	19-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*91.8 %*	*70.4-141*		*5091847*	JH	*19-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5091904	MS	19-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*104 %*	*52.4-130*		*5091904*	MS	*19-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*99.4 %*	*39.9-141*		*5091904*	MS	*19-Sep-25*	*8015B*	

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 29-Sep-25 14:51

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5091909 - 1:4 DI Water										
Blank (5091909-BLK1)				Prepared & Analyzed: 19-Sep-25						
Chloride	ND	16.0	mg/kg							
LCS (5091909-BS1)				Prepared & Analyzed: 19-Sep-25						
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (5091909-BSD1)				Prepared & Analyzed: 19-Sep-25						
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

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CARDINAL Laboratories

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 29-Sep-25 14:51

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5091847 - Volatiles										
Blank (5091847-BLK1)				Prepared: 18-Sep-25 Analyzed: 19-Sep-25						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*ND*		mg/kg	*0.0500*		*91.5*	*70.4-141*			
LCS (5091847-BS1)				Prepared: 18-Sep-25 Analyzed: 19-Sep-25						
Benzene	1.98	0.050	mg/kg	2.00		99.2	71-111			
Toluene	1.81	0.050	mg/kg	2.00		90.5	75-116			
Ethylbenzene	1.82	0.050	mg/kg	2.00		90.8	74.2-119			
m,p-Xylene	3.53	0.100	mg/kg	4.00		88.4	72.5-123			
o-Xylene	1.70	0.050	mg/kg	2.00		85.0	70.5-124			
Total Xylenes	5.24	0.150	mg/kg	6.00		87.3	72.2-123			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0411*		mg/kg	*0.0500*		*82.3*	*70.4-141*			
LCS Dup (5091847-BSD1)				Prepared: 18-Sep-25 Analyzed: 19-Sep-25						
Benzene	2.00	0.050	mg/kg	2.00		100	71-111	0.837	17.6	
Toluene	1.84	0.050	mg/kg	2.00		91.8	75-116	1.50	14.8	
Ethylbenzene	1.88	0.050	mg/kg	2.00		94.0	74.2-119	3.43	14.2	
m,p-Xylene	3.70	0.100	mg/kg	4.00		92.4	72.5-123	4.46	13.6	
o-Xylene	1.79	0.050	mg/kg	2.00		89.7	70.5-124	5.31	13.7	
Total Xylenes	5.49	0.150	mg/kg	6.00		91.5	72.2-123	4.73	13.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0414*		mg/kg	*0.0500*		*82.8*	*70.4-141*			

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 29-Sep-25 14:51

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5091904 - General Prep - Organics										
Blank (5091904-BLK1)				Prepared & Analyzed: 19-Sep-25						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*44.4*		mg/kg	*50.0*		*88.8*	*52.4-130*			
Surrogate: 1-Chlorooctadecane	*41.4*		mg/kg	*50.0*		*82.8*	*39.9-141*			
LCS (5091904-BS1)				Prepared & Analyzed: 19-Sep-25						
GRO C6-C10	212	10.0	mg/kg	200		106	78.7-123			
DRO >C10-C28	205	10.0	mg/kg	200		103	74.8-123			
Total TPH C6-C28	417	10.0	mg/kg	400		104	78.6-121			
Surrogate: 1-Chlorooctane	*50.9*		mg/kg	*50.0*		*102*	*52.4-130*			
Surrogate: 1-Chlorooctadecane	*50.0*		mg/kg	*50.0*		*100*	*39.9-141*			
LCS Dup (5091904-BSD1)				Prepared & Analyzed: 19-Sep-25						
GRO C6-C10	219	10.0	mg/kg	200		109	78.7-123	2.99	11.3	
DRO >C10-C28	211	10.0	mg/kg	200		105	74.8-123	2.68	10.9	
Total TPH C6-C28	429	10.0	mg/kg	400		107	78.6-121	2.84	10.5	
Surrogate: 1-Chlorooctane	*50.9*		mg/kg	*50.0*		*102*	*52.4-130*			
Surrogate: 1-Chlorooctadecane	*49.5*		mg/kg	*50.0*		*99.0*	*39.9-141*			

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Ensolum, LLC.
Project Manager:	Kalei Jennings
Address:	3122 National Parks Hwy
City:	Carlsbad **State:** NM **Zip** 88220
Phone #:	817-683-2503 **Fax #:**
Project #:	07A1988152 **Project Owner:** Hilcorp
Project Name:	Warren Battery Unit #1 SWD
Project Location:	32.530583, -103.146738
Sampler Name:	Alex Ferrell

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H255835 *																		
1	FS13 ~~14~~	1'	C	1			X					X		9/17/2025	1545	X	X	X
2	FS14 ~~15~~	1'	C	1			X					X		9/17/2025	1549	X	X	X
3	FS15 ~~16~~	1'	C	1			X					X		9/17/2025	1553	X	X	X
4	SW12	0-1'	C	1			X					X		9/17/2025	1557	X	X	X

AF

Relinquished By:	**Date:** 9-18-25	**Received By:**	
	Time: 1315		
Relinquished By:	**Date:**	**Received By:**	
	Time:		

Verbal Result: ☐ Yes ☐ No **Add'l Phone #:**

All Results are emailed. Please provide Email address:
Aferrell@ensolum.com DHencmann@ensolum.com
Kiennings@ensolum.com

REMARKS: * Customer requested ID changes. 9/25/25

Delivered By: (Circle One)	**Observed Temp. °C** 2.8	**Sample Condition** Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	**CHECKED BY: (Initials)**
Sampler - UPS - Bus - Other:	**Corrected Temp. °C** 3.1		

FORM-006 R 3.6 02/12/25

Turnaround Time: Standard RUSH ☐ **Thermometer ID** #140 **Correction Factor** +0.3°C

72-hr

Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No **Observed Temp. °C** **Corrected Temp. °C**

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

CARDINAL Laboratories

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

September 24, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/18/25 13:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/18/2025	Sampling Date:	09/17/2025
Reported:	09/24/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 05 1' (H255836-01)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	09/19/2025	ND	1.80	90.2	2.00	8.62	
Toluene*	<0.100	0.100	09/19/2025	ND	1.81	90.7	2.00	7.87	GC-NC, QM-07
Ethylbenzene*	**5.09**	0.100	09/19/2025	ND	1.80	89.9	2.00	7.88	QM-07
Total Xylenes*	**22.4**	0.300	09/19/2025	ND	5.31	88.6	6.00	8.61	GC-NC1, QM-07
Total BTEX	**27.5**	0.600	09/19/2025	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *259 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/19/2025	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1610**	100	09/19/2025	ND	207	103	200	1.82	
DRO >C10-C28*	**14200**	100	09/19/2025	ND	210	105	200	0.503	
EXT DRO >C28-C36	**1850**	100	09/19/2025	ND					

Surrogate: 1-Chlorooctane *494 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *243 %* *39.9-141*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/18/2025	Sampling Date:	09/17/2025
Reported:	09/24/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 05A 3' (H255836-02)

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	09/19/2025	ND	1.80	90.2	2.00	8.62	
Toluene*	<0.050	0.050	09/19/2025	ND	1.81	90.7	2.00	7.87	
Ethylbenzene*	<0.050	0.050	09/19/2025	ND	1.80	89.9	2.00	7.88	
Total Xylenes*	<0.150	0.150	09/19/2025	ND	5.31	88.6	6.00	8.61	
Total BTEX	<0.300	0.300	09/19/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *90.3 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/19/2025	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	09/19/2025	ND	207	103	200	1.82	
DRO >C10-C28*	**15.9**	10.0	09/19/2025	ND	210	105	200	0.503	
EXT DRO >C28-C36	<10.0	10.0	09/19/2025	ND					

Surrogate: 1-Chlorooctane *84.1 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *84.0 %* *39.9-141*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/18/2025	Sampling Date:	09/17/2025
Reported:	09/24/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 06 2' (H255836-03)

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	09/19/2025	ND	1.80	90.2	2.00	8.62	
Toluene*	<0.050	0.050	09/19/2025	ND	1.81	90.7	2.00	7.87	
Ethylbenzene*	<0.050	0.050	09/19/2025	ND	1.80	89.9	2.00	7.88	
Total Xylenes*	<0.150	0.150	09/19/2025	ND	5.31	88.6	6.00	8.61	
Total BTEX	<0.300	0.300	09/19/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *88.7 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/19/2025	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	09/19/2025	ND	207	103	200	1.82	
DRO >C10-C28*	<10.0	10.0	09/19/2025	ND	210	105	200	0.503	
EXT DRO >C28-C36	<10.0	10.0	09/19/2025	ND					

Surrogate: 1-Chlorooctane *84.0 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *80.3 %* *39.9-141*

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CARDINAL Laboratories

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Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/18/2025	Sampling Date:	09/17/2025
Reported:	09/24/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 06A 4' (H255836-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2025	ND	1.80	90.2	2.00	8.62	
Toluene*	<0.050	0.050	09/19/2025	ND	1.81	90.7	2.00	7.87	
Ethylbenzene*	<0.050	0.050	09/19/2025	ND	1.80	89.9	2.00	7.88	
Total Xylenes*	<0.150	0.150	09/19/2025	ND	5.31	88.6	6.00	8.61	
Total BTEX	<0.300	0.300	09/19/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *88.5 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/19/2025	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	09/19/2025	ND	207	103	200	1.82	
DRO >C10-C28*	<10.0	10.0	09/19/2025	ND	210	105	200	0.503	
EXT DRO >C28-C36	<10.0	10.0	09/19/2025	ND					

Surrogate: 1-Chlorooctane *92.1 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *89.9 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/18/2025	Sampling Date:	09/17/2025
Reported:	09/24/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 07 2' (H255836-05)

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	09/19/2025	ND	1.80	90.2	2.00	8.62	
Toluene*	<0.050	0.050	09/19/2025	ND	1.81	90.7	2.00	7.87	
Ethylbenzene*	**0.060**	0.050	09/19/2025	ND	1.80	89.9	2.00	7.88	
Total Xylenes*	**0.670**	0.150	09/19/2025	ND	5.31	88.6	6.00	8.61	GC-NC1
Total BTEX	**0.730**	0.300	09/19/2025	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *116 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**352**	16.0	09/19/2025	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*	**40.6**	10.0	09/19/2025	ND	207	103	200	1.82	
DRO >C10-C28*	**678**	10.0	09/19/2025	ND	210	105	200	0.503	
EXT DRO >C28-C36	**95.9**	10.0	09/19/2025	ND					

Surrogate: 1-Chlorooctane *96.9 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *110 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/18/2025	Sampling Date:	09/17/2025
Reported:	09/24/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 07A 5' (H255836-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2025	ND	1.80	90.2	2.00	8.62	
Toluene*	<0.050	0.050	09/19/2025	ND	1.81	90.7	2.00	7.87	
Ethylbenzene*	<0.050	0.050	09/19/2025	ND	1.80	89.9	2.00	7.88	
Total Xylenes*	<0.150	0.150	09/19/2025	ND	5.31	88.6	6.00	8.61	
Total BTEX	<0.300	0.300	09/19/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *89.3 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**352**	16.0	09/19/2025	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	09/19/2025	ND	207	103	200	1.82	
DRO >C10-C28*	**12.1**	10.0	09/19/2025	ND	210	105	200	0.503	
EXT DRO >C28-C36	<10.0	10.0	09/19/2025	ND					

Surrogate: 1-Chlorooctane *88.1 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *86.3 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Ensolum, LLC.
Project Manager:	Kalei Jennings
Address:	3122 National Parks Hwy
City:	Carlsbad **State:** NM **Zip** 88220
Phone #:	817-683-2503 **Fax #:**
Project #:	07A1988152 **Project Owner:** Hilcorp
Project Name:	Warren Battery Unit #1 SWD
Project Location:	32.530583, -103.146738
Sampler Name:	Alex Ferrell

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING DATE	SAMPLING TIME	Chloride	TPH	BTEX
H255836	BH05	1'	G	1			X					X		9/17/2025	1032	X	X	X
2	BH05A	3'	G	1			X					X		9/17/2025	1036	X	X	X
3	BH06	2'	G	1			X					X		9/17/2025	1229	X	X	X
4	BH06A	4'	G	1			X					X		9/17/2025	1233	X	X	X
5	BH07	2'	G	1			X					X		9/17/2025	1253	X	X	X
6	BH07A	5'	G	1			X					X		9/17/2025	1330	X	X	X

AF

Relinquished By:	**Date:** 9-18-25	**Received By:**	
	Time: 1315		
Relinquished By:	**Date:**	**Received By:**	
	Time:		

Verbal Result: ☐ Yes ☐ No **Add'l Phone #:**

All Results are emailed. Please provide Email address:
Aferrell@ensolum.com DHencmann@ensolum.com
Kjennings@ensolum.com

REMARKS:

Delivered By: (Circle One)	**Observed Temp. °C** 2.8	**Sample Condition** Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	**CHECKED BY: (Initials)** JG	**Turnaround Time:** Standard ☒ Rush ☐
Sampler - UPS - Bus - Other:	**Corrected Temp. °C** 3.1			**Thermometer ID** #140 **Correction Factor** +0.3°C

Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No **Observed Temp. °C** **Corrected Temp. °C**

5-DAY

FORM-006 R 3.6 02/12/25

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

CARDINAL Laboratories

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

September 25, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/19/25 9:37.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/19/2025	Sampling Date:	09/18/2025
Reported:	09/25/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Shalyn Rodriguez
Project Location:	32.530583, -103.146738		

Sample ID: BH 08 0.5' (H255878-01)

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	09/23/2025	ND	1.82	91.1	2.00	11.5	
Toluene*	<0.050	0.050	09/23/2025	ND	1.82	91.1	2.00	8.94	
Ethylbenzene*	<0.050	0.050	09/23/2025	ND	1.96	97.9	2.00	7.38	
Total Xylenes*	<0.150	0.150	09/23/2025	ND	5.74	95.7	6.00	6.99	
Total BTEX	<0.300	0.300	09/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.8 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/22/2025	ND	416	104	400	3.92	

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	09/22/2025	ND	210	105	200	0.0504	
DRO >C10-C28*	<10.0	10.0	09/22/2025	ND	213	107	200	0.175	
EXT DRO >C28-C36	<10.0	10.0	09/22/2025	ND					

Surrogate: 1-Chlorooctane *80.8 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *76.3 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/19/2025	Sampling Date:	09/18/2025
Reported:	09/25/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Shalyn Rodriguez
Project Location:	32.530583, -103.146738		

Sample ID: BH 08A 4' (H255878-02)

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	09/23/2025	ND	1.82	91.1	2.00	11.5	
Toluene*	<0.050	0.050	09/23/2025	ND	1.82	91.1	2.00	8.94	
Ethylbenzene*	<0.050	0.050	09/23/2025	ND	1.96	97.9	2.00	7.38	
Total Xylenes*	<0.150	0.150	09/23/2025	ND	5.74	95.7	6.00	6.99	
Total BTEX	<0.300	0.300	09/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *91.7 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	09/22/2025	ND	416	104	400	3.92	

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	09/22/2025	ND	210	105	200	0.0504	
DRO >C10-C28*	<10.0	10.0	09/22/2025	ND	213	107	200	0.175	
EXT DRO >C28-C36	<10.0	10.0	09/22/2025	ND					

Surrogate: 1-Chlorooctane *81.4 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *77.1 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/19/2025	Sampling Date:	09/18/2025
Reported:	09/25/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Shalyn Rodriguez
Project Location:	32.530583, -103.146738		

Sample ID: BH 08B 5' (H255878-03)

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	09/22/2025	ND	1.72	86.1	2.00	2.59	
Toluene*	<0.050	0.050	09/22/2025	ND	1.78	89.2	2.00	2.91	
Ethylbenzene*	<0.050	0.050	09/22/2025	ND	1.79	89.5	2.00	2.87	
Total Xylenes*	<0.150	0.150	09/22/2025	ND	5.25	87.5	6.00	2.83	
Total BTEX	<0.300	0.300	09/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *89.2 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/22/2025	ND	416	104	400	3.92	

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	09/22/2025	ND	210	105	200	0.0504	
DRO >C10-C28*	<10.0	10.0	09/22/2025	ND	213	107	200	0.175	
EXT DRO >C28-C36	<10.0	10.0	09/22/2025	ND					

Surrogate: 1-Chlorooctane *84.9 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *79.7 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager:	Kalei Jennings	**P.O. #:**	
Address:	3122 National Parks Hwy	**Company:**	
City:	Carlsbad **State:** NM **Zip** 88220	**Attn:**	
Phone #:	817-683-2503 **Fax #:**	**Address:**	
Project #:	07A1988152 **Project Owner:** Hilcorp	**City:**	
Project Name:	Warren Battery Unit #1 SWD	**State:**	
Project Location:	32.530583, -103.146738	**Phone #:**	
Sampler Name:	Alex Ferrell	**Fax #:**	

FOR LAB USE ONLY

Lab I.D.: H255878

	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chloride	TPH	BTEX
1	BH08	0.5'	G	1			X					X		9/18/2025	1400	X	X	X
2	BH08A	4'	G	1			X					X		9/18/2025	1408	X	X	X
3	BH08B	5'	G	1			X					X		9/18/2025	1410	X	X	X

AF

Relinquished By:	**Date:** 9-19-25	**Received By:**	**Verbal Result:** ☐ Yes ☐ No **Add'l Phone #:**
	Time: 730		**All Results are emailed. Please provide Email address:**
Relinquished By:	**Date:** 9.19.25	**Received By:** S Rodriguez	Aferrell@ensolum.com DHencmann@ensolum.com Kjennings@ensolum.com
	Time: 1437		**REMARKS:**

Delivered By: (Circle One)	**Observed Temp. °C** 1.9	**Sample Condition** Cool: ☒ Yes ☐ No; Intact: ☒ Yes ☐ No	**CHECKED BY: (Initials)** SR	**Turnaround Time:** Standard ☒ Rush ☐ 5-Day
Sampler - UPS - Bus - Other:	**Corrected Temp. °C** 2.2			**Thermometer ID #140** **Correction Factor +0.3°C**

Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No; Intact: ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.6 02/12/25

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

CARDINAL Laboratories

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

September 26, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/22/25 11:49.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/22/2025	Sampling Date:	09/19/2025
Reported:	09/26/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Shalyn Rodriguez
Project Location:	32.530583, -103.146738		

Sample ID: BH09 0.5' (H255907-01)

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	09/23/2025	ND	2.04	102	2.00	0.441	
Toluene*	<0.050	0.050	09/23/2025	ND	2.08	104	2.00	0.0677	
Ethylbenzene*	<0.050	0.050	09/23/2025	ND	2.09	104	2.00	0.109	
Total Xylenes*	<0.150	0.150	09/23/2025	ND	6.15	102	6.00	0.247	
Total BTEX	<0.300	0.300	09/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/23/2025	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	09/22/2025	ND	205	102	200	1.76	
DRO >C10-C28*	<10.0	10.0	09/22/2025	ND	200	100	200	0.806	
EXT DRO >C28-C36	<10.0	10.0	09/22/2025	ND					

Surrogate: 1-Chlorooctane *110 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *104 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/22/2025	Sampling Date:	09/19/2025
Reported:	09/26/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Shalyn Rodriguez
Project Location:	32.530583, -103.146738		

Sample ID: BH09 A 1' (H255907-02)

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	09/23/2025	ND	2.04	102	2.00	0.441	
Toluene*	<0.050	0.050	09/23/2025	ND	2.08	104	2.00	0.0677	
Ethylbenzene*	<0.050	0.050	09/23/2025	ND	2.09	104	2.00	0.109	
Total Xylenes*	<0.150	0.150	09/23/2025	ND	6.15	102	6.00	0.247	
Total BTEX	<0.300	0.300	09/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/23/2025	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	09/22/2025	ND	205	102	200	1.76	
DRO >C10-C28*	<10.0	10.0	09/22/2025	ND	200	100	200	0.806	
EXT DRO >C28-C36	<10.0	10.0	09/22/2025	ND					

Surrogate: 1-Chlorooctane *104 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *98.4 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/22/2025	Sampling Date:	09/19/2025
Reported:	09/26/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Shalyn Rodriguez
Project Location:	32.530583, -103.146738		

Sample ID: BH09 B 5' (H255907-03)

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	09/23/2025	ND	2.04	102	2.00	0.441	
Toluene*	<0.050	0.050	09/23/2025	ND	2.08	104	2.00	0.0677	
Ethylbenzene*	<0.050	0.050	09/23/2025	ND	2.09	104	2.00	0.109	
Total Xylenes*	<0.150	0.150	09/23/2025	ND	6.15	102	6.00	0.247	
Total BTEX	<0.300	0.300	09/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/23/2025	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	09/22/2025	ND	205	102	200	1.76	
DRO >C10-C28*	<10.0	10.0	09/22/2025	ND	200	100	200	0.806	
EXT DRO >C28-C36	<10.0	10.0	09/22/2025	ND					

Surrogate: 1-Chlorooctane *101 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *96.7 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC.
Project Manager:	Kalei Jennings
Address:	3122 National Parks Hwy
City:	Carlsbad State: NM Zip 88220
Phone #:	817-683-2503 Fax #:
Project #:	07A1988152 Project Owner: Hilcorp
Project Name:	Warren Battery Unit #1 SWD
Project Location:	32.530583, -103.146738
Sampler Name:	Alex Ferrell

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H255907																		
1	BH09	0.5'	G	1			X					X		9/19/2025	900	X	X	X
2	BH09A	1'	G	1			X					X		9/19/2025	902	X	X	X
3	BH09B	5'	G	1			X					X		9/19/2025	910	X	X	X

AF

Relinquished By:	Date: 9-22-25 Time: 1149	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: Aferrell@ensolum.com DHencmann@ensolum.com Kjennings@ensolum.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.3 Corrected Temp. °C 1.2	Sample Condition Cool Intact ☑ Yes ☐ Yes ☐ No ☐ No	CHECKED BY: (Initials) SR

REMARKS:

Turnaround Time: Standard ☒ Rush ☐ 5-Day

Thermometer ID #140
Correction Factor +0.3°C

Bacteria (only) Sample Condition
Cool Intact Observed Temp. °C
☐ Yes ☐ Yes
☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.6 02/12/25

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

CARDINAL Laboratories

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

September 29, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/23/25 13:02.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/23/2025	Sampling Date:	09/22/2025
Reported:	09/29/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: FS 17 1' (H255943-01)

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	09/24/2025	ND	1.91	95.5	2.00	8.41	
Toluene*	<0.050	0.050	09/24/2025	ND	1.99	99.6	2.00	6.12	
Ethylbenzene*	<0.050	0.050	09/24/2025	ND	2.01	101	2.00	4.59	
Total Xylenes*	<0.150	0.150	09/24/2025	ND	5.97	99.5	6.00	4.41	
Total BTEX	<0.300	0.300	09/24/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/24/2025	ND	416	104	400	3.77	

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	09/24/2025	ND	213	107	200	2.49	
DRO >C10-C28*	**123**	10.0	09/24/2025	ND	230	115	200	1.86	
EXT DRO >C28-C36	<10.0	10.0	09/24/2025	ND					

Surrogate: 1-Chlorooctane *93.5 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *95.4 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/23/2025	Sampling Date:	09/22/2025
Reported:	09/29/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: SW 13 0-1' (H255943-02)

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	09/24/2025	ND	1.91	95.5	2.00	8.41	
Toluene*	<0.050	0.050	09/24/2025	ND	1.99	99.6	2.00	6.12	
Ethylbenzene*	<0.050	0.050	09/24/2025	ND	2.01	101	2.00	4.59	
Total Xylenes*	<0.150	0.150	09/24/2025	ND	5.97	99.5	6.00	4.41	
Total BTEX	<0.300	0.300	09/24/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	09/24/2025	ND	416	104	400	3.77	

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	09/24/2025	ND	213	107	200	2.49	
DRO >C10-C28*	**334**	10.0	09/24/2025	ND	230	115	200	1.86	
EXT DRO >C28-C36	**74.7**	10.0	09/24/2025	ND					

Surrogate: 1-Chlorooctane *99.1 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *108 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager:	Kalei Jennings	**P.O. #:**	
Address:	3122 National Parks Hwy	**Company:**	
City:	Carlsbad **State:** NM **Zip** 88220	**Attn:**	
Phone #:	817-683-2503 **Fax #:**	**Address:**	
Project #:	07A1988152 **Project Owner:** Hilcorp	**City:**	
Project Name:	Warren Battery Unit #1 SWD	**State:**	
Project Location:	32.530583, -103.146738	**Phone #:**	
Sampler Name:	Alex Ferrell	**Fax #:**	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H255943-1	FS17	1'	C	1			X					X		9/22/2025	1046	X	X	X
-2	SW13	0-1'	C	1			X					X		9/22/2025	1120	X	X	X

AF

acc 04024011

Relinquished By:	**Date:** 9-23-25	**Received By:**	
	Time: 1302		
Relinquished By:	**Date:**	**Received By:**	
	Time:		

Verbal Result: ☐ Yes ☐ No **Add'l Phone #:**

All Results are emailed. Please provide Email address:
Aferrell@ensolum.com DHencmann@ensolum.com Kjennings@ensolum.com

REMARKS:

Delivered By: (Circle One)	**Observed Temp. °C** 1.2	**Sample Condition** Cool ☑ Yes Intact ☐ Yes	**CHECKED BY: (Initials)**	**Turnaround Time:** CS Standard ☒ Rush ☐ 5-Day
Sampler - UPS - Bus - Other:	**Corrected Temp. °C** 1.5	☐ No ☐ No		**Thermometer ID #140** **Correction Factor +0.3°C**

Bacteria (only) Sample Condition Cool ☐ Yes Intact ☐ Yes ☐ No ☐ No **Observed Temp. °C** **Corrected Temp. °C**

FORM-006 R 3.6 02/12/25

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

CARDINAL Laboratories

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

September 29, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/23/25 13:02.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/23/2025	Sampling Date:	09/22/2025
Reported:	09/29/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 10 0.5' (H255944-01)

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	09/24/2025	ND	1.91	95.5	2.00	8.41	
Toluene*	<0.050	0.050	09/24/2025	ND	1.99	99.6	2.00	6.12	
Ethylbenzene*	<0.050	0.050	09/24/2025	ND	2.01	101	2.00	4.59	
Total Xylenes*	<0.150	0.150	09/24/2025	ND	5.97	99.5	6.00	4.41	
Total BTEX	<0.300	0.300	09/24/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/24/2025	ND	416	104	400	3.77	

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	09/24/2025	ND	213	107	200	2.49	
DRO >C10-C28*	<10.0	10.0	09/24/2025	ND	230	115	200	1.86	
EXT DRO >C28-C36	<10.0	10.0	09/24/2025	ND					

Surrogate: 1-Chlorooctane *91.2 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *89.3 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/23/2025	Sampling Date:	09/22/2025
Reported:	09/29/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 10A 5' (H255944-02)

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	09/24/2025	ND	1.91	95.5	2.00	8.41	
Toluene*	<0.050	0.050	09/24/2025	ND	1.99	99.6	2.00	6.12	
Ethylbenzene*	<0.050	0.050	09/24/2025	ND	2.01	101	2.00	4.59	
Total Xylenes*	<0.150	0.150	09/24/2025	ND	5.97	99.5	6.00	4.41	
Total BTEX	<0.300	0.300	09/24/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/24/2025	ND	416	104	400	3.77	

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	09/24/2025	ND	213	107	200	2.49	
DRO >C10-C28*	<10.0	10.0	09/24/2025	ND	230	115	200	1.86	
EXT DRO >C28-C36	<10.0	10.0	09/24/2025	ND					

Surrogate: 1-Chlorooctane *98.2 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *95.0 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC.
Project Manager:	Kalei Jennings
Address:	3122 National Parks Hwy
City:	Carlsbad **State:** NM **Zip** 88220
Phone #:	817-683-2503 **Fax #:**
Project #:	07A1988152 **Project Owner:** Hilcorp
Project Name:	Warren Battery Unit #1 SWD
Project Location:	32.530583, -103.146738
Sampler Name:	Alex Ferrell

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H255944-1	BH10	0.5'	G	1			X					X		9/22/2025	1315	X	X	X
-2	BH10A	5'	G	1			X					X		9/22/2025	1325	X	X	X

AC

all 04024011K

Relinquished By:	**Date:** 4-23-25	**Received By:**
	Time: 1302	
Relinquished By:	**Date:**	**Received By:**
	Time:	

Verbal Result: ☐ Yes ☐ No **Add'l Phone #:**

All Results are emailed. Please provide Email address:
Aferrell@ensolum.com DHencmann@ensolum.com
Kjennings@ensolum.com

REMARKS:

Delivered By: (Circle One)	**Observed Temp. °C** 1.2	**Sample Condition** Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	**CHECKED BY: (Initials)**
Sampler - UPS - Bus - Other:	**Corrected Temp. °C** 1.5		

Turnaround Time: Standard ☒ Rush ☐ 5-Day

CS

Thermometer ID #140
Correction Factor +0.3°C

Bacteria (only) Sample Condition
Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.6 02/12/25

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

CARDINAL Laboratories

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

October 02, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/25/25 13:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS 14A 5'	H256007-01	Soil	24-Sep-25 14:00	25-Sep-25 13:55
FS 16A 5'	H256007-02	Soil	24-Sep-25 14:04	25-Sep-25 13:55
FS 18 2'	H256007-03	Soil	24-Sep-25 12:20	25-Sep-25 13:55
FS 19 2'	H256007-04	Soil	24-Sep-25 12:24	25-Sep-25 13:55
SW 14 0-2'	H256007-05	Soil	24-Sep-25 12:27	25-Sep-25 13:55
SW 15 0-2'	H256007-06	Soil	24-Sep-25 12:30	25-Sep-25 13:55
SW 16 0-2'	H256007-07	Soil	24-Sep-25 12:34	25-Sep-25 13:55

10/02/25 - Client changed the sample ID of -01 and -02 (see COC). This is the revised report and will replace the one sent on 10/01/25.

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

FS 14A 5'

H256007-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**320**		16.0	mg/kg	4	5092649	HM	26-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*91.0 %*	*70.4-141*		*5092539*	JH	*26-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*83.0 %*	*52.4-130*		*5092602*	MS	*26-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*84.8 %*	*39.9-141*		*5092602*	MS	*26-Sep-25*	*8015B*	

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

FS 16A 5'

H256007-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**336**		16.0	mg/kg	4	5092649	HM	26-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*90.3 %*	*70.4-141*		*5092539*	JH	*26-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
DRO >C10-C28*	**98.0**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
EXT DRO >C28-C36	**11.2**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*86.3 %*	*52.4-130*		*5092602*	MS	*26-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*91.2 %*	*39.9-141*		*5092602*	MS	*26-Sep-25*	*8015B*	

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

FS 18 2'

H256007-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**176**		16.0	mg/kg	4	5092649	HM	26-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*99.2 %*	*70.4-141*		*5092539*	JH	*26-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
DRO >C10-C28*	**517**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
EXT DRO >C28-C36	**79.0**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*84.0 %*	*52.4-130*		*5092602*	MS	*26-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*93.6 %*	*39.9-141*		*5092602*	MS	*26-Sep-25*	*8015B*	

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

FS 19 2'

H256007-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**144**		16.0	mg/kg	4	5092649	HM	26-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*92.2 %*	*70.4-141*		*5092539*	JH	*26-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*86.4 %*	*52.4-130*		*5092602*	MS	*26-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*89.1 %*	*39.9-141*		*5092602*	MS	*26-Sep-25*	*8015B*	

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

SW 14 0-2'

H256007-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	5092649	HM	26-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*91.4 %*	*70.4-141*		*5092539*	JH	*26-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
DRO >C10-C28*	**154**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
EXT DRO >C28-C36	**23.7**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*89.9 %*	*52.4-130*		*5092602*	MS	*26-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*96.1 %*	*39.9-141*		*5092602*	MS	*26-Sep-25*	*8015B*	

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

SW 15 0-2'

H256007-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**432**		16.0	mg/kg	4	5092649	HM	26-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*94.1 %*	*70.4-141*		*5092539*	JH	*26-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
DRO >C10-C28*	**189**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
EXT DRO >C28-C36	**33.1**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*88.4 %*	*52.4-130*		*5092602*	MS	*26-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*96.1 %*	*39.9-141*		*5092602*	MS	*26-Sep-25*	*8015B*	

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

SW 16 0-2'

H256007-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**208**		16.0	mg/kg	4	5092649	HM	26-Sep-25	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5092539	JH	26-Sep-25	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*92.3 %*	*70.4-141*		*5092539*	JH	*26-Sep-25*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
DRO >C10-C28*	**53.6**		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5092602	MS	26-Sep-25	8015B	
Surrogate: 1-Chlorooctane			*87.4 %*	*52.4-130*		*5092602*	MS	*26-Sep-25*	*8015B*	
Surrogate: 1-Chlorooctadecane			*91.2 %*	*39.9-141*		*5092602*	MS	*26-Sep-25*	*8015B*	

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5092649 - 1:4 DI Water										
Blank (5092649-BLK1)				Prepared & Analyzed: 26-Sep-25						
Chloride	ND	16.0	mg/kg							
LCS (5092649-BS1)				Prepared & Analyzed: 26-Sep-25						
Chloride	448	16.0	mg/kg	400		112	80-120			
LCS Dup (5092649-BSD1)				Prepared & Analyzed: 26-Sep-25						
Chloride	416	16.0	mg/kg	400		104	80-120	7.41	20	

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5092539 - Volatiles										
Blank (5092539-BLK1)				Prepared: 25-Sep-25 Analyzed: 26-Sep-25						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*ND*		mg/kg	*0.0500*		*90.9*	*70.4-141*			
LCS (5092539-BS1)				Prepared: 25-Sep-25 Analyzed: 26-Sep-25						
Benzene	2.08	0.050	mg/kg	2.00		104	71-111			
Toluene	2.04	0.050	mg/kg	2.00		102	75-116			
Ethylbenzene	1.98	0.050	mg/kg	2.00		99.1	74.2-119			
m,p-Xylene	3.87	0.100	mg/kg	4.00		96.7	72.5-123			
o-Xylene	1.93	0.050	mg/kg	2.00		96.4	70.5-124			
Total Xylenes	5.80	0.150	mg/kg	6.00		96.6	72.2-123			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0443*		mg/kg	*0.0500*		*88.6*	*70.4-141*			
LCS Dup (5092539-BSD1)				Prepared: 25-Sep-25 Analyzed: 26-Sep-25						
Benzene	1.97	0.050	mg/kg	2.00		98.6	71-111	5.28	17.6	
Toluene	1.94	0.050	mg/kg	2.00		97.2	75-116	4.83	14.8	
Ethylbenzene	1.89	0.050	mg/kg	2.00		94.6	74.2-119	4.60	14.2	
m,p-Xylene	3.70	0.100	mg/kg	4.00		92.4	72.5-123	4.54	13.6	
o-Xylene	1.85	0.050	mg/kg	2.00		92.4	70.5-124	4.25	13.7	
Total Xylenes	5.54	0.150	mg/kg	6.00		92.4	72.2-123	4.44	13.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0448*		mg/kg	*0.0500*		*89.6*	*70.4-141*			

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CARDINAL Laboratories

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Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: WARREN BATTERY UNIT #1 SWD Project Number: 07A1988152 Project Manager: KALEI JENNINGS Fax To:	Reported: 02-Oct-25 14:43

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5092602 - General Prep - Organics										
Blank (5092602-BLK1)				Prepared & Analyzed: 26-Sep-25						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*47.8*		mg/kg	*50.0*		*95.6*	*52.4-130*			
Surrogate: 1-Chlorooctadecane	*49.3*		mg/kg	*50.0*		*98.5*	*39.9-141*			
LCS (5092602-BS1)				Prepared & Analyzed: 26-Sep-25						
GRO C6-C10	194	10.0	mg/kg	200		97.1	78.7-123			
DRO >C10-C28	211	10.0	mg/kg	200		105	74.8-123			
Total TPH C6-C28	405	10.0	mg/kg	400		101	78.6-121			
Surrogate: 1-Chlorooctane	*52.0*		mg/kg	*50.0*		*104*	*52.4-130*			
Surrogate: 1-Chlorooctadecane	*55.6*		mg/kg	*50.0*		*111*	*39.9-141*			
LCS Dup (5092602-BSD1)				Prepared & Analyzed: 26-Sep-25						
GRO C6-C10	204	10.0	mg/kg	200		102	78.7-123	4.84	11.3	
DRO >C10-C28	215	10.0	mg/kg	200		108	74.8-123	1.96	10.9	
Total TPH C6-C28	419	10.0	mg/kg	400		105	78.6-121	3.35	10.5	
Surrogate: 1-Chlorooctane	*56.1*		mg/kg	*50.0*		*112*	*52.4-130*			
Surrogate: 1-Chlorooctadecane	*56.5*		mg/kg	*50.0*		*113*	*39.9-141*			

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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

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager:	Kalei Jennings	**P.O. #:**	
Address:	3122 National Parks Hwy	**Company:**	
City:	Carlsbad **State:** NM **Zip** 88220	**Attn:**	
Phone #:	817-683-2503 **Fax #:**	**Address:**	
Project #:	07A1988152 **Project Owner:** Hilcorp	**City:**	
Project Name:	Warren Battery Unit #1 SWD	**State:**	
Project Location:	32.530583, -103.146738	**Phone #:**	
Sampler Name:	Alex Ferrell	**Fax #:**	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H25[illegible]007	*																	
1	FS14A	5'	C	1			X					X		9/24/2025	1400	X	X	X
2	FS16A	5'	C	1			X					X		9/24/2025	1404	X	X	X
3	FS18	2'	C	1			X					X		9/24/2025	1220	X	X	X
4	FS19	2'	C	1			X					X		9/24/2025	1224	X	X	X
5	SW14	0-2'	C	1			X					X		9/24/2025	1227	X	X	X
6	SW15	0-2'	C	1			X					X		9/24/2025	1230	X	X	X
7	SW16	0-2'	C	1			X					X		9/24/2025	1234	X	X	X

AF

Relinquished By:	**Date:** 9.25.25 **Time:** 1355	**Received By:**	
Relinquished By:	**Date:** **Time:**	**Received By:**	

Verbal Result: ☐ Yes ☐ No **Add'l Phone #:**

All Results are emailed. Please provide Email address:
Aferrell@ensolum.com DHencmann@ensolum.com
Kjennings@ensolum.com

REMARKS: *Customer requested ID changes. T:- 10/1/25

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
FORM-006 R 3.6 02/12/25

Observed Temp. °C 0.4 **Corrected Temp. °C** 0.7

Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No

CHECKED BY: (Initials)

Turnaround Time: Standard ☒ Rush ☐ 5-Day

Thermometer ID #140 **Correction Factor +0.3°C**

Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No **Observed Temp. °C** **Corrected Temp. °C**

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

CARDINAL Laboratories

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

October 02, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/26/25 11:09.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/26/2025	Sampling Date:	09/25/2025
Reported:	10/02/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Alyssa Parras
Project Location:	32.530583, -103.146738		

Sample ID: SW 17 0-5' (H256050-01)

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	09/29/2025	ND	1.90	94.9	2.00	2.39	
Toluene*	<0.050	0.050	09/29/2025	ND	2.01	100	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/29/2025	ND	2.11	106	2.00	0.0849	
Total Xylenes*	<0.150	0.150	09/29/2025	ND	6.02	100	6.00	0.0362	
Total BTEX	<0.300	0.300	09/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *121 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	09/29/2025	ND	416	104	400	3.77	

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	09/27/2025	ND	208	104	200	2.63	
DRO >C10-C28*	**136**	10.0	09/27/2025	ND	202	101	200	1.84	
EXT DRO >C28-C36	**24.9**	10.0	09/27/2025	ND					

Surrogate: 1-Chlorooctane *94.1 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *96.8 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/26/2025	Sampling Date:	09/25/2025
Reported:	10/02/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Alyssa Parras
Project Location:	32.530583, -103.146738		

Sample ID: SW 18 0-5' (H256050-02)

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	09/29/2025	ND	1.90	94.9	2.00	2.39	
Toluene*	<0.050	0.050	09/29/2025	ND	2.01	100	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/29/2025	ND	2.11	106	2.00	0.0849	
Total Xylenes*	<0.150	0.150	09/29/2025	ND	6.02	100	6.00	0.0362	
Total BTEX	<0.300	0.300	09/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	09/29/2025	ND	416	104	400	3.77	

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	09/27/2025	ND	208	104	200	2.63	
DRO >C10-C28*	<10.0	10.0	09/27/2025	ND	202	101	200	1.84	
EXT DRO >C28-C36	<10.0	10.0	09/27/2025	ND					

Surrogate: 1-Chlorooctane *90.9 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *88.4 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/26/2025	Sampling Date:	09/25/2025
Reported:	10/02/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Alyssa Parras
Project Location:	32.530583, -103.146738		

Sample ID: SW 19 0-5' (H256050-03)

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	09/29/2025	ND	1.90	94.9	2.00	2.39	
Toluene*	<0.050	0.050	09/29/2025	ND	2.01	100	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/29/2025	ND	2.11	106	2.00	0.0849	
Total Xylenes*	<0.150	0.150	09/29/2025	ND	6.02	100	6.00	0.0362	
Total BTEX	<0.300	0.300	09/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *129 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	09/29/2025	ND	416	104	400	3.77	

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	09/27/2025	ND	208	104	200	2.63	
DRO >C10-C28*	**414**	10.0	09/27/2025	ND	202	101	200	1.84	
EXT DRO >C28-C36	**85.0**	10.0	09/27/2025	ND					

Surrogate: 1-Chlorooctane *90.1 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *99.1 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/26/2025	Sampling Date:	09/25/2025
Reported:	10/02/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Alyssa Parras
Project Location:	32.530583, -103.146738		

Sample ID: SW 12A 0-3' (H256050-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/29/2025	ND	1.90	94.9	2.00	2.39	
Toluene*	<0.050	0.050	09/29/2025	ND	2.01	100	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/29/2025	ND	2.11	106	2.00	0.0849	
Total Xylenes*	<0.150	0.150	09/29/2025	ND	6.02	100	6.00	0.0362	
Total BTEX	<0.300	0.300	09/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	09/29/2025	ND	416	104	400	3.77	

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	09/27/2025	ND	208	104	200	2.63	
DRO >C10-C28*	**442**	10.0	09/27/2025	ND	202	101	200	1.84	
EXT DRO >C28-C36	**116**	10.0	09/27/2025	ND					

Surrogate: 1-Chlorooctane *89.2 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *99.9 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager:	Kalei Jennings	**P.O. #:**	
Address:	3122 National Parks Hwy	**Company:**	
City:	Carlsbad **State:** NM **Zip** 88220	**Attn:**	
Phone #:	817-683-2503 **Fax #:**	**Address:**	
Project #:	07A1988152 **Project Owner:** Hilcorp	**City:**	
Project Name:	Warren Battery Unit #1 SWD	**State:**	
Project Location:	32.530583, -103.146738	**Phone #:**	
Sampler Name:	Alex Ferrell	**Fax #:**	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chloride	TPH	BTEX
H250650																		
1	SW17	0-5'	C	1			X					X		9/25/2025	1324	X	X	X
2	SW18	0-5'	C	1			X					X		9/25/2025	1535	X	X	X
3	SW19	0-5'	C	1			X					X		9/25/2025	1540	X	X	X
4	SW12A	0-3'	C	1			X					X		9/25/2025	1638	X	X	X

Relinquished By:	**Date:** 9/26/25 **Time:** 7:40	**Received By:** Trevor Warren	**Verbal Result:** ☐ Yes ☐ No **Add'l Phone #:**
Relinquished By: Trevor Warren	**Date:** 9.26.25 **Time:** 1109	**Received By:**	**All Results are emailed. Please provide Email address:** Aferrell@ensolum.com DHencmann@ensolum.com Kjennings@ensolum.com
			REMARKS:

Delivered By: (Circle One)	**Observed Temp. °C** 3.8	**Sample Condition** Cool: ☑ Yes ☐ No; Intact: ☐ Yes ☐ No	**CHECKED BY: (Initials)** AF	**Turnaround Time:** Standard ☒ Rush ☐ 5-Day	**Bacteria (only) Sample Condition** Cool: ☐ Yes ☐ No; Intact: ☐ Yes ☐ No
Sampler - UPS - Bus - Other:	**Corrected Temp. °C** 4.1			**Thermometer ID** #140 **Correction Factor** +0.3°C	**Observed Temp. °C** **Corrected Temp. °C**

FORM-006 R 3.6 02/12/25

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

CARDINAL Laboratories

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

October 02, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/26/25 11:09.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/26/2025	Sampling Date:	09/25/2025
Reported:	10/02/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Alyssa Parras
Project Location:	32.530583, -103.146738		

Sample ID: BH11 0.5' (H256051-01)

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	09/29/2025	ND	1.90	94.9	2.00	2.39	
Toluene*	<0.050	0.050	09/29/2025	ND	2.01	100	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/29/2025	ND	2.11	106	2.00	0.0849	
Total Xylenes*	<0.150	0.150	09/29/2025	ND	6.02	100	6.00	0.0362	
Total BTEX	<0.300	0.300	09/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	09/29/2025	ND	416	104	400	3.77	

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	09/27/2025	ND	208	104	200	2.63	
DRO >C10-C28*	<10.0	10.0	09/27/2025	ND	202	101	200	1.84	
EXT DRO >C28-C36	<10.0	10.0	09/27/2025	ND					

Surrogate: 1-Chlorooctane *90.3 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *89.4 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/26/2025	Sampling Date:	09/25/2025
Reported:	10/02/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Alyssa Parras
Project Location:	32.530583, -103.146738		

Sample ID: BH11 A 3' (H256051-02)

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	09/29/2025	ND	1.90	94.9	2.00	2.39	
Toluene*	<0.050	0.050	09/29/2025	ND	2.01	100	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/29/2025	ND	2.11	106	2.00	0.0849	
Total Xylenes*	<0.150	0.150	09/29/2025	ND	6.02	100	6.00	0.0362	
Total BTEX	<0.300	0.300	09/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/29/2025	ND	416	104	400	7.41	

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	09/27/2025	ND	208	104	200	2.63	
DRO >C10-C28*	<10.0	10.0	09/27/2025	ND	202	101	200	1.84	
EXT DRO >C28-C36	<10.0	10.0	09/27/2025	ND					

Surrogate: 1-Chlorooctane *96.8 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *94.5 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/26/2025	Sampling Date:	09/25/2025
Reported:	10/02/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Alyssa Parras
Project Location:	32.530583, -103.146738		

Sample ID: BH11 B 5' (H256051-03)

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	09/29/2025	ND	1.90	94.9	2.00	2.39	
Toluene*	<0.050	0.050	09/29/2025	ND	2.01	100	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/29/2025	ND	2.11	106	2.00	0.0849	
Total Xylenes*	<0.150	0.150	09/29/2025	ND	6.02	100	6.00	0.0362	
Total BTEX	<0.300	0.300	09/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/29/2025	ND	416	104	400	7.41	

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	09/27/2025	ND	208	104	200	2.63	
DRO >C10-C28*	<10.0	10.0	09/27/2025	ND	202	101	200	1.84	
EXT DRO >C28-C36	<10.0	10.0	09/27/2025	ND					

Surrogate: 1-Chlorooctane *92.1 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *90.1 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC.
Project Manager:	Kalei Jennings
Address:	3122 National Parks Hwy
City:	Carlsbad **State:** NM **Zip** 88220
Phone #:	817-683-2503 **Fax #:**
Project #:	07A1988152 **Project Owner:** Hilcorp
Project Name:	Warren Battery Unit #1 SWD
Project Location:	32.530583, -103.146738
Sampler Name:	Alex Ferrell

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H256005																		
1	BH11	0.5'	G	1			X					X		9/25/2025	945	X	X	X
2	BH11A	3'	G	1			X					X		9/25/2025	954	X	X	X
3	BH11B	5'	G	1			X					X		9/25/2025	1000	X	X	X

Relinquished By:	**Date:** 09/26/25 **Time:** 7:40	**Received By:** Trevor Warren	
Relinquished By: Trevor Warren	**Date:** 9.26.25 **Time:** 1109	**Received By:** ADams	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	**Observed Temp. °C** 3.8 **Corrected Temp. °C** 4.1	**Sample Condition** Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	**CHECKED BY:** (Initials) AD

FORM-006 R 3.6 02/12/25

Verbal Result: ☐ Yes ☐ No **Add'l Phone #:**

All Results are emailed. Please provide Email address:
Aferrell@ensolum.com DHencmann@ensolum.com Kjennings@ensolum.com

REMARKS:

Turnaround Time: Standard ☒ Rush ☐ 5-Day

Thermometer ID #140
Correction Factor +0.3°C

Bacteria (only) Sample Condition
Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

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

CARDINAL Laboratories

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

October 10, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/09/25 13:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/10/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 12 0.5' (H256304-01)

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	10/09/2025	ND	1.85	92.5	2.00	1.11	
Toluene*	<0.050	0.050	10/09/2025	ND	1.90	95.0	2.00	0.820	
Ethylbenzene*	**0.084**	0.050	10/09/2025	ND	1.91	95.6	2.00	0.858	
Total Xylenes*	<0.150	0.150	10/09/2025	ND	5.93	98.9	6.00	0.562	
Total BTEX	<0.300	0.300	10/09/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	10/10/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2025	ND	211	106	200	5.12	
DRO >C10-C28*	**1840**	10.0	10/09/2025	ND	199	99.7	200	4.19	
EXT DRO >C28-C36	**597**	10.0	10/09/2025	ND					

Surrogate: 1-Chlorooctane *93.0 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *152 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/10/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 12A 4' (H256304-02)

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	10/09/2025	ND	1.85	92.5	2.00	1.11	
Toluene*	<0.050	0.050	10/09/2025	ND	1.90	95.0	2.00	0.820	
Ethylbenzene*	<0.050	0.050	10/09/2025	ND	1.91	95.6	2.00	0.858	
Total Xylenes*	<0.150	0.150	10/09/2025	ND	5.93	98.9	6.00	0.562	
Total BTEX	<0.300	0.300	10/09/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	10/10/2025	ND	432	108	400	3.77	

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	10/09/2025	ND	211	106	200	5.12	
DRO >C10-C28*	**84.0**	10.0	10/09/2025	ND	199	99.7	200	4.19	
EXT DRO >C28-C36	**52.1**	10.0	10/09/2025	ND					

Surrogate: 1-Chlorooctane *96.5 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *95.0 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/10/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 12B 8' (H256304-03)

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	10/09/2025	ND	1.85	92.5	2.00	1.11	
Toluene*	<0.050	0.050	10/09/2025	ND	1.90	95.0	2.00	0.820	
Ethylbenzene*	**0.069**	0.050	10/09/2025	ND	1.91	95.6	2.00	0.858	
Total Xylenes*	<0.150	0.150	10/09/2025	ND	5.93	98.9	6.00	0.562	
Total BTEX	<0.300	0.300	10/09/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**816**	16.0	10/10/2025	ND	432	108	400	3.77	

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	10/09/2025	ND	211	106	200	5.12	
DRO >C10-C28*	**1050**	10.0	10/09/2025	ND	199	99.7	200	4.19	
EXT DRO >C28-C36	**313**	10.0	10/09/2025	ND					

Surrogate: 1-Chlorooctane *93.7 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *119 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/10/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 12C 12' (H256304-04)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	10/09/2025	ND	1.85	92.5	2.00	1.11	GC-NC
Toluene*	<0.200	0.200	10/09/2025	ND	1.90	95.0	2.00	0.820	GC-NC
Ethylbenzene*	**23.0**	0.200	10/09/2025	ND	1.91	95.6	2.00	0.858	
Total Xylenes*	**20.2**	0.600	10/09/2025	ND	5.93	98.9	6.00	0.562	
Total BTEX	**43.2**	1.20	10/09/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *158 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**432**	16.0	10/10/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1030**	10.0	10/09/2025	ND	211	106	200	5.12	
DRO >C10-C28*	**3870**	10.0	10/09/2025	ND	199	99.7	200	4.19	
EXT DRO >C28-C36	**428**	10.0	10/09/2025	ND					

Surrogate: 1-Chlorooctane *333 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *217 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/10/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 12D 13' (H256304-05)

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	10/09/2025	ND	1.85	92.5	2.00	1.11	
Toluene*	<0.050	0.050	10/09/2025	ND	1.90	95.0	2.00	0.820	
Ethylbenzene*	<0.050	0.050	10/09/2025	ND	1.91	95.6	2.00	0.858	
Total Xylenes*	<0.150	0.150	10/09/2025	ND	5.93	98.9	6.00	0.562	
Total BTEX	<0.300	0.300	10/09/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**368**	16.0	10/10/2025	ND	432	108	400	3.77	

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	10/09/2025	ND	211	106	200	5.12	
DRO >C10-C28*	**138**	10.0	10/09/2025	ND	199	99.7	200	4.19	
EXT DRO >C28-C36	**35.5**	10.0	10/09/2025	ND					

Surrogate: 1-Chlorooctane *91.7 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *92.6 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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

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

CARDINAL Laboratories

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**	
Project Manager:	Kalei Jennings	**P.O. #:**	
Address:	3122 National Parks Hwy	**Company:**	
City:	Carlsbad **State:** NM **Zip** 88220	**Attn:**	
Phone #:	817-683-2503 **Fax #:**	**Address:**	
Project #:	07A1988152 **Project Owner:** Hilcorp	**City:**	
Project Name:	Warren Battery Unit #1 SWD	**State:**	
Project Location:	32.530583, -103.146738	**Phone #:**	
Sampler Name:	Alex Ferrell	**Fax #:**	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chloride	TPH	BTEX
H256304-1	BH12	0.5'	G	1			X					X		10/8/2025	1039	X	X	X
2	BH12A	4'	G	1			X					X		10/8/2025	1050	X	X	X
3	BH12B	8'	G	1			X					X		10/8/2025	1023	X	X	X
4	BH12C	12'	G	1			X					X		10/8/2025	1406	X	X	X
5	BH12D	13'	G	1			X					X		10/8/2025	1424	X	X	X

AF

CS-0402401K

Relinquished By:	**Date:** 10-9-25 **Time:** 1327	**Received By:**	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	**Date:** **Time:**	**Received By:**	All Results are emailed. Please provide Email address: Aferrell@ensolum.com Kjennings@ensolum.com
			REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other: FORM-006 R 3.6 02/12/25	Observed Temp. °C 0.6 Corrected Temp. °C 0.3	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Rush ☒ 24-HR Thermometer ID #140 Correction Factor +0.3°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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

CARDINAL Laboratories

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

October 15, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/09/25 13:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/15/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BF 01 (H256312-01)

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	10/10/2025	ND	1.80	90.1	2.00	1.94	
Toluene*	<0.050	0.050	10/10/2025	ND	1.92	95.8	2.00	2.48	
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.98	98.9	2.00	2.73	
Total Xylenes*	<0.150	0.150	10/10/2025	ND	6.31	105	6.00	2.68	
Total BTEX	<0.300	0.300	10/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *90.7 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/10/2025	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	10/10/2025	ND	209	105	200	5.70	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	218	109	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane *88.5 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *83.0 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/15/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: FS 20 1' (H256312-02)

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	10/10/2025	ND	1.80	90.1	2.00	1.94	
Toluene*	<0.050	0.050	10/10/2025	ND	1.92	95.8	2.00	2.48	
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	1.98	98.9	2.00	2.73	
Total Xylenes*	<0.150	0.150	10/10/2025	ND	6.31	105	6.00	2.68	
Total BTEX	<0.300	0.300	10/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *88.0 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/10/2025	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	10/10/2025	ND	209	105	200	5.70	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	218	109	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane *91.5 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *85.6 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC.
Project Manager:	Kalei Jennings
Address:	3122 National Parks Hwy
City:	Carlsbad
State:	NM
Zip	88220
Phone #:	817-683-2503
Fax #:	
Project #:	07A1988152
Project Owner:	Hilcorp
Project Name:	Warren Battery Unit #1 SWD
Project Location:	32.530583, -103.146738
Sampler Name:	Alex Ferrell

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H256312-1	BF01	N/A	C	1			X					X		10/8/2025	838	X	X	X
-2	FS20	1'	C	1			X					X		10/8/2025	1330	X	X	X

CS-0402401K

Relinquished By:	Date: 10-9-25	Received By:	
	Time: 1327		
Relinquished By:	Date:	Received By:	
	Time:		

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
Aferrell@ensolum.com Kjennings@ensolum.com

REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 0.6	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) TO
Sampler - UPS - Bus - Other:	Corrected Temp. °C 0.3		

Turnaround Time: Standard ☒ Rush ☐ 5-DAY
Thermometer ID #140
Correction Factor +0.3°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.6 02/12/25

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

CARDINAL Laboratories

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

October 15, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/09/25 13:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/15/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 13 0.5' (H256313-01)

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	10/10/2025	ND	2.32	116	2.00	11.2	
Toluene*	<0.050	0.050	10/10/2025	ND	2.31	116	2.00	16.1	
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	2.38	119	2.00	16.2	
Total Xylenes*	<0.150	0.150	10/10/2025	ND	7.10	118	6.00	16.3	
Total BTEX	<0.300	0.300	10/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	10/10/2025	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/10/2025	ND	210	105	200	3.04	
DRO >C10-C28*	**1930**	10.0	10/10/2025	ND	214	107	200	1.26	
EXT DRO >C28-C36	**437**	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane *81.2 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *143 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/15/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 13A 1' (H256313-02)

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	10/10/2025	ND	2.32	116	2.00	11.2	
Toluene*	<0.050	0.050	10/10/2025	ND	2.31	116	2.00	16.1	
Ethylbenzene*	**0.138**	0.050	10/10/2025	ND	2.38	119	2.00	16.2	
Total Xylenes*	<0.150	0.150	10/10/2025	ND	7.10	118	6.00	16.3	
Total BTEX	<0.300	0.300	10/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/10/2025	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	10/10/2025	ND	210	105	200	3.04	
DRO >C10-C28*	**941**	10.0	10/10/2025	ND	214	107	200	1.26	
EXT DRO >C28-C36	**553**	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane *90.7 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *103 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/09/2025	Sampling Date:	10/08/2025
Reported:	10/15/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 13B 3' (H256313-03)

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	10/10/2025	ND	2.32	116	2.00	11.2	
Toluene*	<0.050	0.050	10/10/2025	ND	2.31	116	2.00	16.1	
Ethylbenzene*	<0.050	0.050	10/10/2025	ND	2.38	119	2.00	16.2	
Total Xylenes*	<0.150	0.150	10/10/2025	ND	7.10	118	6.00	16.3	
Total BTEX	<0.300	0.300	10/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.9 %* *70.4-141*

Chloride, SM4500Cl-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	10/10/2025	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	10/10/2025	ND	210	105	200	3.04	
DRO >C10-C28*	<10.0	10.0	10/10/2025	ND	214	107	200	1.26	
EXT DRO >C28-C36	<10.0	10.0	10/10/2025	ND					

Surrogate: 1-Chlorooctane *93.2 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *93.2 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager:	Kalei Jennings	**P.O. #:**	
Address:	3122 National Parks Hwy	**Company:**	
City:	Carlsbad **State:** NM **Zip** 88220	**Attn:**	
Phone #:	817-683-2503 **Fax #:**	**Address:**	
Project #:	07A1988152 **Project Owner:** Hilcorp	**City:**	
Project Name:	Warren Battery Unit #1 SWD	**State:**	
Project Location:	32.530583, -103.146738	**Phone #:**	
Sampler Name:	Alex Ferrell	**Fax #:**	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H256313	BH13	0.5'	G	1			X					X		10/8/2025	840	X	X	X
	BH13A	1'	G	1			X					X		10/8/2025	841	X	X	X
	BH13B	3'	G	1			X					X		10/8/2025	844	X	X	X

AP

CS-040240114

Relinquished By:	**Date:** 10-9-25 **Time:** 1327	**Received By:**	**Verbal Result:** ☐ Yes ☐ No **Add'l Phone #:**
			All Results are emailed. Please provide Email address: Aferrell@ensolum.com Kjennings@ensolum.com
Relinquished By:	**Date:** **Time:**	**Received By:**	**REMARKS:**

Delivered By: (Circle One) Sampler - UPS - Bus - Other: FORM-006 R 3.6 02/12/25	**Observed Temp. °C** 0.4 **Corrected Temp. °C** 0.3	**Sample Condition** Cool ☑ Yes ☑ Intact ☑ Yes ☐ No ☐ No	**CHECKED BY: (Initials)** TO.	**Turnaround Time:** Standard ☒ Rush ☐ 5-DAY **Thermometer ID #140** **Correction Factor +0.3°C** **Bacteria (only) Sample Condition** Cool ☐ Yes ☐ Intact ☐ Yes ☐ No ☐ No **Observed Temp. °C** **Corrected Temp. °C**

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

CARDINAL Laboratories

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

October 17, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/13/25 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BF 02 (H256393-01)

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	10/14/2025	ND	1.85	92.4	2.00	4.11	
Toluene*	<0.050	0.050	10/14/2025	ND	1.93	96.6	2.00	1.85	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	1.99	99.7	2.00	0.136	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	5.94	98.9	6.00	0.0624	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/14/2025	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	10/13/2025	ND	198	99.0	200	8.40	
DRO >C10-C28*	**31.1**	10.0	10/13/2025	ND	191	95.6	200	7.72	
EXT DRO >C28-C36	**17.8**	10.0	10/13/2025	ND					

Surrogate: 1-Chlorooctane *79.5 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *75.7 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager:	Kalei Jennings	**P.O. #:**	
Address:	3122 National Parks Hwy	**Company:**	
City:	Carlsbad **State:** NM **Zip** 88220	**Attn:**	
Phone #:	817-683-2503 **Fax #:**	**Address:**	
Project #:	07A1988152 **Project Owner:** Hilcorp	**City:**	
Project Name:	Warren Battery Unit #1 SWD	**State:**	
Project Location:	32.530583, -103.146738	**Phone #:**	
Sampler Name:	Alex Ferrell	**Fax #:**	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H256393-1	AF-BE01-BF02	N/A	C	1			X					X		10/10/2025	1530	X	X	X

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 consequental 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:** 10-13-25 **Time:** 1215	**Received By:**	
Relinquished By:	**Date:** **Time:**	**Received By:**	

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:
Aferrell@ensolum.com Kjennings@ensolum.com

REMARKS:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:
FORM-006 R 3.6 02/12/25

Observed Temp. °C 3.2
Corrected Temp. °C 3.5

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) T.O.

Turnaround Time: Standard ☒ Rush ☐ 5-DAY

Thermometer ID #140
Correction Factor +0.3°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

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

CARDINAL Laboratories

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

October 17, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/13/25 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 14 0.5' (H256394-01)

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	10/14/2025	ND	1.85	92.4	2.00	4.11	
Toluene*	<0.050	0.050	10/14/2025	ND	1.93	96.6	2.00	1.85	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	1.99	99.7	2.00	0.136	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	5.94	98.9	6.00	0.0624	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	10/14/2025	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	10/14/2025	ND	198	99.0	200	8.40	
DRO >C10-C28*	<10.0	10.0	10/14/2025	ND	191	95.6	200	7.72	
EXT DRO >C28-C36	<10.0	10.0	10/14/2025	ND					

Surrogate: 1-Chlorooctane *91.8 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *88.5 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 14A 4' (H256394-02)

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	10/14/2025	ND	1.85	92.4	2.00	4.11	
Toluene*	<0.050	0.050	10/14/2025	ND	1.93	96.6	2.00	1.85	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	1.99	99.7	2.00	0.136	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	5.94	98.9	6.00	0.0624	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	10/14/2025	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	10/14/2025	ND	198	99.0	200	8.40	
DRO >C10-C28*	<10.0	10.0	10/14/2025	ND	191	95.6	200	7.72	
EXT DRO >C28-C36	<10.0	10.0	10/14/2025	ND					

Surrogate: 1-Chlorooctane *87.8 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *84.7 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 14B 8' (H256394-03)

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	10/14/2025	ND	2.27	114	2.00	2.54	
Toluene*	<0.050	0.050	10/14/2025	ND	2.12	106	2.00	0.567	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	2.20	110	2.00	1.04	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	6.62	110	6.00	0.808	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	10/14/2025	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	10/13/2025	ND	219	110	200	1.43	
DRO >C10-C28*	<10.0	10.0	10/13/2025	ND	209	105	200	0.490	
EXT DRO >C28-C36	<10.0	10.0	10/13/2025	ND					

Surrogate: 1-Chlorooctane *95.6 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *95.1 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH 14C 13' (H256394-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2025	ND	2.27	114	2.00	2.54	
Toluene*	<0.050	0.050	10/14/2025	ND	2.12	106	2.00	0.567	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	2.20	110	2.00	1.04	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	6.62	110	6.00	0.808	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.7 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	10/14/2025	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	10/13/2025	ND	219	110	200	1.43	
DRO >C10-C28*	<10.0	10.0	10/13/2025	ND	209	105	200	0.490	
EXT DRO >C28-C36	<10.0	10.0	10/13/2025	ND					

Surrogate: 1-Chlorooctane *96.2 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *92.4 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager:	Kalei Jennings	**P.O. #:**	
Address:	3122 National Parks Hwy	**Company:**	
City:	Carlsbad **State:** NM **Zip** 88220	**Attn:**	
Phone #:	817-683-2503 **Fax #:**	**Address:**	
Project #:	07A1988152 **Project Owner:** Hilcorp	**City:**	
Project Name:	Warren Battery Unit #1 SWD	**State:**	
Project Location:	32.530583, -103.146738	**Phone #:**	
Sampler Name:	Alex Ferrell	**Fax #:**	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chloride	TPH	BTEX
H256394																		
1	BH14	0.5'	G	1			X					X		10/10/2025	931	X	X	X
2	BH14A	4'	G	1			X					X		10/10/2025	1324	X	X	X
3	BH14B	8'	G	1			X					X		10/10/2025	1352	X	X	X
4	BH14C	13'	G	1			X					X		10/10/2025	1430	X	X	X

AF

Relinquished By:	**Date:** 10-13-25 **Time:** 1315	**Received By:**	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
			All Results are emailed. Please provide Email address: Aferrell@ensolum.com Kjennings@ensolum.com
Relinquished By:	**Date:** **Time:**	**Received By:**	**REMARKS:**

Delivered By: (Circle One) Sampler - UPS - Bus - Other: FORM-006 R 3.6 02/12/25	**Observed Temp. °C** 3.2 **Corrected Temp. °C** 3.5	**Sample Condition** Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No	**CHECKED BY: (Initials)**	**Turnaround Time:** Standard ☒ Rush ☐ 5-DAY **Thermometer ID #140** **Correction Factor +0.3°C** **Bacteria (only) Sample Condition** Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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

CARDINAL Laboratories

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

October 17, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/13/25 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH15 0.5' (H256395-01)

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	10/14/2025	ND	2.27	114	2.00	2.54	
Toluene*	<0.050	0.050	10/14/2025	ND	2.12	106	2.00	0.567	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	2.20	110	2.00	1.04	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	6.62	110	6.00	0.808	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	10/14/2025	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	10/13/2025	ND	219	110	200	1.43	
DRO >C10-C28*	<10.0	10.0	10/13/2025	ND	209	105	200	0.490	
EXT DRO >C28-C36	<10.0	10.0	10/13/2025	ND					

Surrogate: 1-Chlorooctane *98.8 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *92.7 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH15 A 4' (H256395-02)

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	10/14/2025	ND	2.27	114	2.00	2.54	
Toluene*	<0.050	0.050	10/14/2025	ND	2.12	106	2.00	0.567	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	2.20	110	2.00	1.04	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	6.62	110	6.00	0.808	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.8 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/14/2025	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	10/13/2025	ND	219	110	200	1.43	
DRO >C10-C28*	<10.0	10.0	10/13/2025	ND	209	105	200	0.490	
EXT DRO >C28-C36	<10.0	10.0	10/13/2025	ND					

Surrogate: 1-Chlorooctane *97.2 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *94.1 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH15 B 8' (H256395-03)

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	10/14/2025	ND	2.27	114	2.00	2.54	
Toluene*	<0.050	0.050	10/14/2025	ND	2.12	106	2.00	0.567	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	2.20	110	2.00	1.04	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	6.62	110	6.00	0.808	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/14/2025	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	10/13/2025	ND	219	110	200	1.43	
DRO >C10-C28*	<10.0	10.0	10/13/2025	ND	209	105	200	0.490	
EXT DRO >C28-C36	<10.0	10.0	10/13/2025	ND					

Surrogate: 1-Chlorooctane *99.6 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *96.0 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/10/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: BH15 C 13' (H256395-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2025	ND	2.27	114	2.00	2.54	
Toluene*	<0.050	0.050	10/14/2025	ND	2.12	106	2.00	0.567	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	2.20	110	2.00	1.04	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	6.62	110	6.00	0.808	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	10/14/2025	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	10/13/2025	ND	219	110	200	1.43	
DRO >C10-C28*	<10.0	10.0	10/13/2025	ND	209	105	200	0.490	
EXT DRO >C28-C36	<10.0	10.0	10/13/2025	ND					

Surrogate: 1-Chlorooctane *94.4 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *89.8 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC.
Project Manager:	Kalei Jennings
Address:	3122 National Parks Hwy
City:	Carlsbad State: NM Zip 88220
Phone #:	817-683-2503 Fax #:
Project #:	07A1988152 Project Owner: Hilcorp
Project Name:	Warren Battery Unit #1 SWD
Project Location:	32.530583, -103.146738
Sampler Name:	Alex Ferrell

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H256395																		
1	BH15	0.5'	G	1			X					X		10/10/2025	1048	X	X	X
2	BH15A	4'	G	1			X					X		10/10/2025	1332	X	X	X
3	BH15B	8'	G	1			X					X		10/10/2025	1400	X	X	X
4	BH15C	13'	G	1			X					X		10/10/2025	1450	X	X	X

AF

Relinquished By:	Date: 10-13-25	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1215		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	Aferrell@ensolum.com Kjennings@ensolum.com
	Time:		REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other: FORM-006 R 3.6 02/12/25

Observed Temp. °C 3.2 Corrected Temp. °C 3.5

Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No

CHECKED BY: (Initials) AF

Turnaround Time: Standard ☒ Rush ☐ 5-DAY

Thermometer ID #140 Correction Factor +0.3°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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

CARDINAL Laboratories

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

October 17, 2025

KALEI JENNINGS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: WARREN BATTERY UNIT #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/13/25 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
KALEI JENNINGS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	10/13/2025	Sampling Date:	10/09/2025
Reported:	10/17/2025	Sampling Type:	Soil
Project Name:	WARREN BATTERY UNIT #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	07A1988152	Sample Received By:	Tamara Oldaker
Project Location:	32.530583, -103.146738		

Sample ID: CS01 0.5' (H256396-01)

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	10/14/2025	ND	2.27	114	2.00	2.54	
Toluene*	<0.050	0.050	10/14/2025	ND	2.12	106	2.00	0.567	
Ethylbenzene*	<0.050	0.050	10/14/2025	ND	2.20	110	2.00	1.04	
Total Xylenes*	<0.150	0.150	10/14/2025	ND	6.62	110	6.00	0.808	
Total BTEX	<0.300	0.300	10/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	10/14/2025	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	10/13/2025	ND	219	110	200	1.43	
DRO >C10-C28*	**612**	10.0	10/13/2025	ND	209	105	200	0.490	
EXT DRO >C28-C36	**86.1**	10.0	10/13/2025	ND					

Surrogate: 1-Chlorooctane *97.0 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *109 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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

Celey D. Keene, Lab Director/Quality Manager

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC.
Project Manager:	Kalei Jennings
Address:	3122 National Parks Hwy
City:	Carlsbad
State:	NM
Zip	88220
Phone #:	817-683-2503
Fax #:	
Project #:	07A1988152
Project Owner:	Hilcorp
Project Name:	Warren Battery Unit #1 SWD
Project Location:	32.530583, -103.146738
Sampler Name:	Alex Ferrell

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH	BTEX
H256396	CS01	0.5'	C	1			X					X		10/9/2025	1045	X	X	X

AF

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 consequental 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: 10-13-25 Time: 1215	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: Aferrell@ensolum.com Kjennings@ensolum.com
			REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other: FORM-006 R 3.6 02/12/25	Observed Temp. °C 3.2 Corrected Temp. °C 3.5	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials)	Turnaround Time: Standard ☒ Rush ☐ 5-DAY Thermometer ID #140 Correction Factor +0.3°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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

ENSOLUM

APPENDIX E

NMOCD Correspondence

From: Velez, Nelson, EMNRD
To: Stuart Hyde
Cc: Fatima Smith; Devin Hencmann; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD
Subject: Re: [EXTERNAL] nAPP2500352359 - Warren Unit Battery #1 and SWD Sampling Notification Variance Request
Date: Tuesday, January 14, 2025 1:04:56 PM
Attachments: image001.png
image002.png
image003.png
image005.jpg
Outlook-1d2bmbzg.png

[**EXTERNAL EMAIL**]
Good afternoon Stuart,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

Nelson Velez • **Environmental Specialist - Adv**
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Stuart Hyde <shyde@ensolum.com>
Sent: Tuesday, January 14, 2025 11:49 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Fatima Smith <fsmith@ensolum.com>; Devin Hencmann <dhencmann@ensolum.com>
Subject: [EXTERNAL] nAPP2500352359 - Warren Unit Battery #1 and SWD Sampling Notification Variance Request

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

Nelson,

On behalf of Hilcorp Energy Company, we are requesting a variance from the 2-business day sampling notification requirement outlined in 19.15.29.12(D)(1)(a) NMAC to allow soil sampling to begin on Wednesday January 15, 2025 at the Warren Unit Battery #1 and SWD site. Due to the availability of contractors, we are wanting to start digging at the site tomorrow in order to expedite the cleanup process.

Please reach out if you have any questions or concerns. Thanks and talk to you soon.

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

---

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, January 14, 2025 11:17 AM
To: Fatima Smith <fsmith@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 420470

[**EXTERNAL EMAIL**]
To whom it may concern (c/o Fatima Smith for HILCORP ENERGY COMPANY),
The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2500352359.

The sampling event is expected to take place:

When: 01/15/2025 @ 08:00
Where: H-33-20S-38E 0 FNL 0 FEL (32.530583,-103.146738)

Additional Information: Contact PM Fatima Smith, 575-725-1196

Sampling will occur on Wednesday January 15 through Friday January 17, 2025

Additional Instructions: Warren Unit Battery #1 and SWD pad, coordinates 32.530583, -103.146738

Due to the availability of contractors, we are requesting a variance from the 2-business day sampling notification requirement outlined in 19.15.29.12(D)(1)(a) NMAC to allow soil sampling to begin on Wednesday January 15, 2025

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Kalei Jennings

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, September 15, 2025 11:36 AM
To: Kalei Jennings
Cc: Billy Ginn; robert.tarbet@hilcorp.com; Devin Hencmann; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD
Subject: Re: [EXTERNAL] NAPP2500352359 - WARREN UNIT BATTERY #1 & SWD

[**EXTERNAL EMAIL**]
Good morning Kalei,

Thank you for the correspondence. 90-day time extension is approved. Remediation Due date has been updated to December 15, 2025.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

Regards,

Nelson Velez ● Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, September 15, 2025 10:05 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] NAPP2500352359 - WARREN UNIT BATTERY #1 & SWD

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Monday, September 15, 2025 10:04 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Billy Ginn <william.ginn@hilcorp.com>; R. Quynten Tarbet <robert.tarbet@hilcorp.com>; Devin Hencmann <dhencmann@ensolum.com>
Subject: [EXTERNAL] NAPP2500352359 - WARREN UNIT BATTERY #1 & SWD

To Whom it May Concern,

On behalf of Hilcorp Energy Company, we respectfully submit this correspondence to provide an update on remediation activities and to formally request a 90-day extension for the WARREN UNIT BATTERY #1 & SWD, located in Lea County, New Mexico (32.530583,-103.146738). The release occurred on January 3, 2025. A Remediation Work Plan was submitted on April 3, 2025, detailing delineation and excavation activities that were completed and including a request to accept regional groundwater data that did not meet the NMOCD preferred distance (0.5 miles) to the Site. On June 18, 2024, the Remediation Work Plan was denied. Following subsequent discussions, OCD and Hilcorp agreed that the site qualifies for the application of groundwater standards corresponding to a depth range of 51 to 100 feet. This concurrence clarified the required delineation effort.

Multiple efforts have been taken to delineate the extent of the release. Due to the presence of a competent formation within the battery, additional delineation and remediation will require the use of heavy equipment. Hilcorp intends to utilize a drill rig or equivalent equipment to delineate and verify the deferral area. Remediation activities are ongoing, however; to allow sufficient time to coordinate options for delineation, finalize remediation activities, and prepare and submit the associated report, we respectfully request a 90-day extension, extending the deadline from September 15, 2025, to December 15, 2025.

If you have any questions or concerns, please feel free to contact me or Billy Ginn at william.ginn@hilcorp.com or (832) 561-4185.

Thank you,

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

ENSOLUM

Attachment I

Site Summary Letter & Deferral Request; dated April 3, 2025

ENSOLUM

April 3, 2025

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

Re: Site Summary Letter and Deferral Request
Warren Unit Battery #1 & SWD
Hilcorp Energy Company
NMOCD Incident No: nAPP2500352359
Lea County, New Mexico

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Site Summary Letter and Deferral Request* for the Warren Unit Battery #1 & SWD (Site). The Site is located on private land in rural Lea County, New Mexico, in the southeast quarter of the northeast quarter of Section 33, Township 20 South, Range 38 East (Figure 1).

SITE BACKGROUND

On January 3, 2025, Hilcorp operations discovered a release of 50 barrels (bbls) of produced water and 1 bbl of skim oil originating from a 400-bbl aboveground storage tank (AST). This release was the result of a compromised high-level alarm. Upon discovery of the release, Hilcorp personnel isolated the tank and dispatched a vacuum truck to recover the standing liquids; approximately [insert volume] bbls of fluid were recovered. Subsequently, Hilcorp submitted a *Spill and Release Notification Form* to the New Mexico Oil Conservation Division (NMOCD) on January 3, 2025. The release was assigned NMOCD Incident Number nAPP2500352359.

SITE CHARACTERIZATION

As part of the Site investigation, local geology/hydrogeology and nearby sensitive receptors were assessed in accordance with Title 19, Chapter 15, Part 29, Sections 11 and 12 (19.15.29.11 and 12) of the New Mexico Administrative Code (NMAC). This information is further discussed below.

GEOLOGY AND HYDROGEOLOGY

The Site is located within the Delaware Basin, a major structural feature of the Permian Basin. The eastward-dipping Delaware Basin is subdivided into several formations and contains about 25,000 feet (7,600 meters) of laminated siltstone and sandstone. Aside from clastic sediment, the Delaware Basin also contains carbonate deposits of the Delaware Mountain Group, originating from the Guadalupian times when the Hovey Channel allowed access from the sea into the basin (Ward et. al., 1986). The hydrogeologic properties of the Delaware basin display variable

hydrogeologic properties dependent on location. Where sufficient yield is present, the primary use of water from this formation is for domestic and/or livestock supply.

POTENTIAL SENSITIVE RECEPTORS

Potential nearby receptors were assessed through desktop reviews of United States Geological Survey (USGS) topographic maps, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, New Mexico Office of the State Engineer (NMOSE) database, aerial photographs, and Site-specific observations.

The nearest significant watercourse to the Site is a stream/river located approximately 1.57 miles south of the well pad. The nearest fresh water well is NMOSE permitted well L-13546, located approximately 3,887 feet southeast of the Site with a recorded depth to water of 75.88 feet below ground surface (bgs). Well L-13546 is located at an elevation of approximately 3,510 feet above mean sea level, which is approximately 12 feet lower in elevation than the Site. As such, depth to groundwater is estimated to be between 50 feet and 100 feet bgs. The water well record is included in Appendix A.

The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland (Figure 1). No wellhead protection areas, springs, or domestic/stock wells are located within 1,000 feet from the Site (Figure 1). The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area designated as low potential karst by the Bureau of Land Management (BLM)). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site. A Site receptor map is shown on Figure 1.

SITE CLOSURE CRITERIA

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

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

DELINEATION AND SOIL SAMPLING ACTIVITIES

Following the discovery of the release, Ensolum personnel sampled soil along the release path at depths ranging from 0.5 feet to 1.5 feet bgs on January 7, 2025. Soil samples SS01 through SS03 were field screened for chloride and the presence of volatile organic compounds (VOCs) with a calibrated photoionization detector (PID). Soil samples were collected directly into laboratory-provided jars and immediately placed on ice. Samples were submitted to Eurofins Environment Testing (Eurofins) in Midland, Texas for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B, TPH following EPA Method 8015M/D, and chloride following EPA Method 300.0.

Results from this initial sampling event indicated soil at 0.5 feet bgs exceeded the Closure Criteria from samples SS01, SS01A, SS02, and SS03 for one or more COCs. Additionally, BTEX concentrations exceeded the Closure Criteria at a depth of 1.5 feet bgs in samples SS01A.

Ensolum performed additional delineation activities on January 29, 2025, and advanced four hand auger borings (BH01 through BH04) and three potholes (PH01 through PH03) using a backhoe to depths of 4 feet bgs. The borings and potholes were advanced in all cardinal directions from the on-Site release surrounding production equipment, as shown on Figure 2. Soil samples were collected at depths of 0.5 feet and 4 feet bgs in each of these locations to assess the vertical and lateral extent of impacts.

During delineation activities, an Ensolum geologist logged lithology and field screened for chloride and petroleum hydrocarbons using the methods described above. Soil samples were collected at depth intervals indicating the greatest impacts based on field screening results and from the terminal depth of the boring/pothole. Soil samples were collected as described above and submitted to Eurofins for analysis of BTEX, TPH, and chloride. Based on analytical results, all soil samples collected from the borings and potholes were in compliance with the applicable Closure Criteria.

Lastly, soil samples SS02, SS03, and SS04 were additionally collected on February 24, 2025, along the release flow path to reassess TPH concentrations in these areas. Soil was field screened and collected in the manner described above and submitted to the laboratory for BTEX, TPH, and chloride analysis. TPH concentrations from all locations exceeded the Closure Criteria. Additionally, BTEX concentrations exceeded the Closure Criteria in sample SS04.

Sampling notifications were provided to the NMOCD prior to delineation activities and are provided in Appendix B. Analytical results collected during the delineation efforts are summarized in Table 1, with complete laboratory reports included in Appendix C. Initial and delineation sample locations are shown on Figure 2.

EXCAVATION AND CONFIRMATION SOIL SAMPLING ACTIVITIES

Between January 28 and January 31, 2025, Ensolum personnel conducted excavation oversight to remove impacted soil. To direct activities during excavation, Ensolum personnel field screened for VOCs with a calibrated PID as impacted soil was removed. Once field screening indicated impacted soil had been removed, five-point composite soil samples were collected from the floor (FS01 through FS13) and sidewalls (SW01 through SW11) of the excavation at a frequency of one sample per 200 square feet. Notification to the NMOCD was provided prior to sampling (Appendix A). The five-point composite samples were prepared by placing five equivalent aliquots of soil into a 1-gallon resealable plastic bag and homogenizing the samples by thoroughly mixing. The soil samples were then placed into laboratory-provided containers and transported under proper chain of custody procedures to Eurofins for analysis of TPH, BTEX, and chloride using the same methods as previously described. Sample locations are shown in Figure 3. The excavation was advanced to a depth of 4 feet bgs. Due to safety concerns from active surface lines within the vicinity, the excavation was completed to the maximum extent practicable (MEP) with extents of the excavations staying at least 2 feet from all active lines, as shown on Figure 3.

Results from the excavation indicate all soil samples collected from the base and sidewalls were in compliance with the applicable Closure Criteria for those areas accessible. Sample results are also summarized in Table 1. Laboratory analytical reports from the excavation samples are included in Appendix B. Photographs taken during Site activities are provided in Appendix C.

CONCLUSIONS AND DEFERRAL REQUEST

Site activities have successfully delineated the extent of impacted soil at the Site. COCs in the soil exceeding Closure Criteria are limited to a confined area immediately around production equipment and surface piping to an approximate depth of 4 feet bgs. Based on the analytical results from the excavation floor samples, as well as the boring and pothole data collected at the Site, soil impacts in areas SS02, SS03, and SS04 are likely limited in vertical extent and are assumed to be contained within the top 4 feet of soil. Based on the approximate area and depth of impacted soil identified (57 feet by 85 feet by 4 feet deep), it is estimated that approximately 717 cubic yards of impacted soil remain at the Site. Based on the proximity of impacted soil to the production equipment, mechanical removal of the soil at this time could compromise the integrity of the equipment. As such, Hilcorp requests removal of the impacted soil be deferred until the well is plugged and abandoned and/or major reconstruction of the facility in the area of impacts occurs. Hilcorp believes deferring the remediation of impacted soil will not negatively impact human health, the environment, or groundwater.

The remainder of the release that was not excavated remained on the well pad that is currently in operation for oil and gas production purposes. As such, 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 Reclamation Plan prepared at the time of plugging and abandonment activities for the Site.

REFERENCES

Ward, R.F.; et al. (1986). "Upper Permian (Guadalupian) facies and their association with hydrocarbons-Permian basin, west Texas and New Mexico"

We appreciate the opportunity to provide this work plan to the NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,

Ensolum, LLC

Fatima Smith
Project Geologist
(575) 725-1196
fsmith@ensolum.com

Stuart Hyde, PG (licensed in WA & TX)
Senior Managing Geologist
(970) 903-1607
shyde@ensolum.com

Figure 1: Site Receptor Map
Figure 2: Delineation Locations
Figure 3: Excavation Sample Locations

Table 1: Soil Sample Analytical Results

Appendix A: Water Well Report
Appendix B: Agency Correspondence
Appendix C: Laboratory Analytical Reports
Appendix D: Site Photographs

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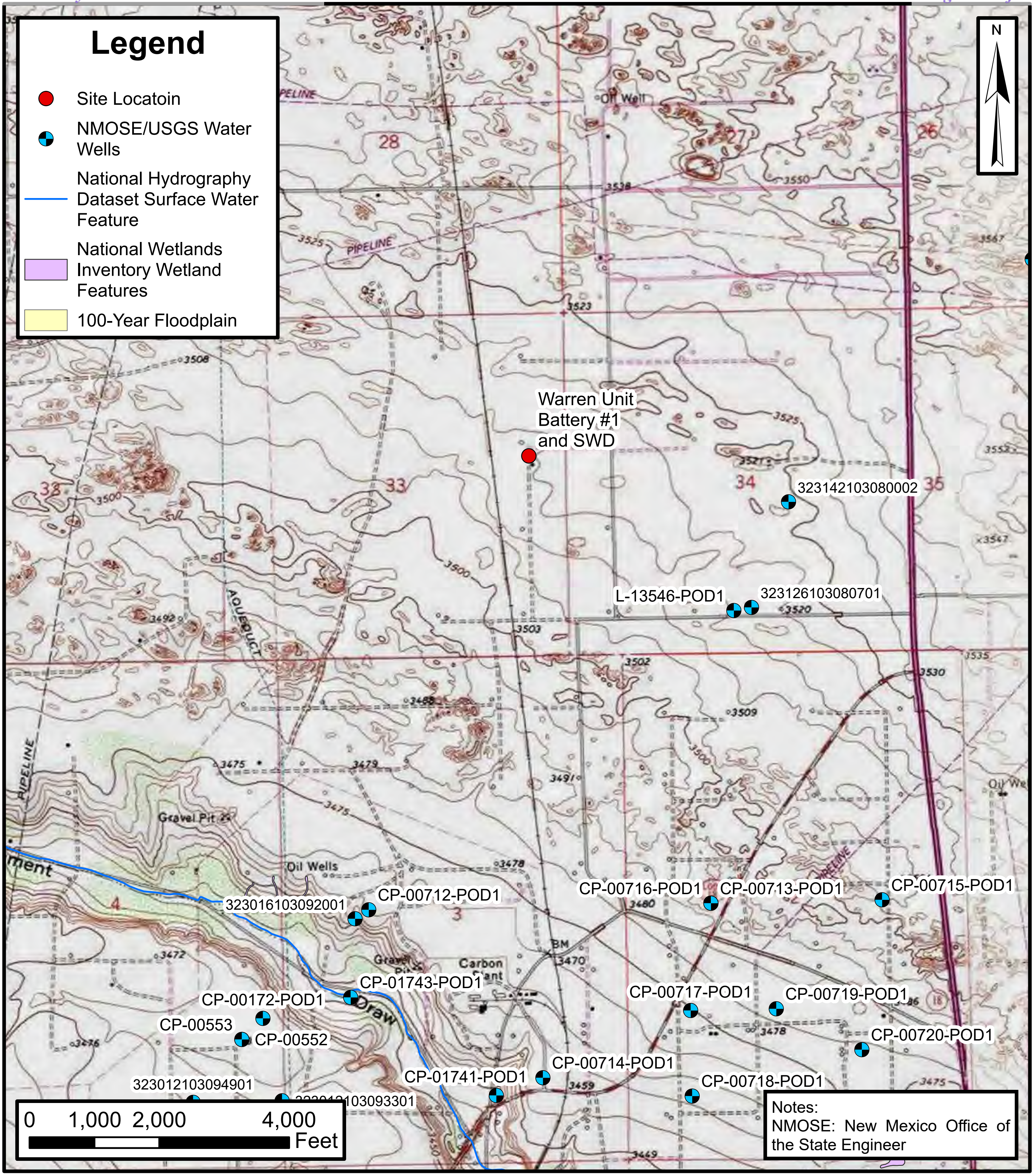
FIGURES



Default Folder: C:\Users\Greg Palese\OneDrive - ENSOLUM, LLC\Desktop\Ensolum GIS\Ensolum GIS\1 - Durango\Hilcorp\07A1988155 - Warren Unit Battery #1 and SWD

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

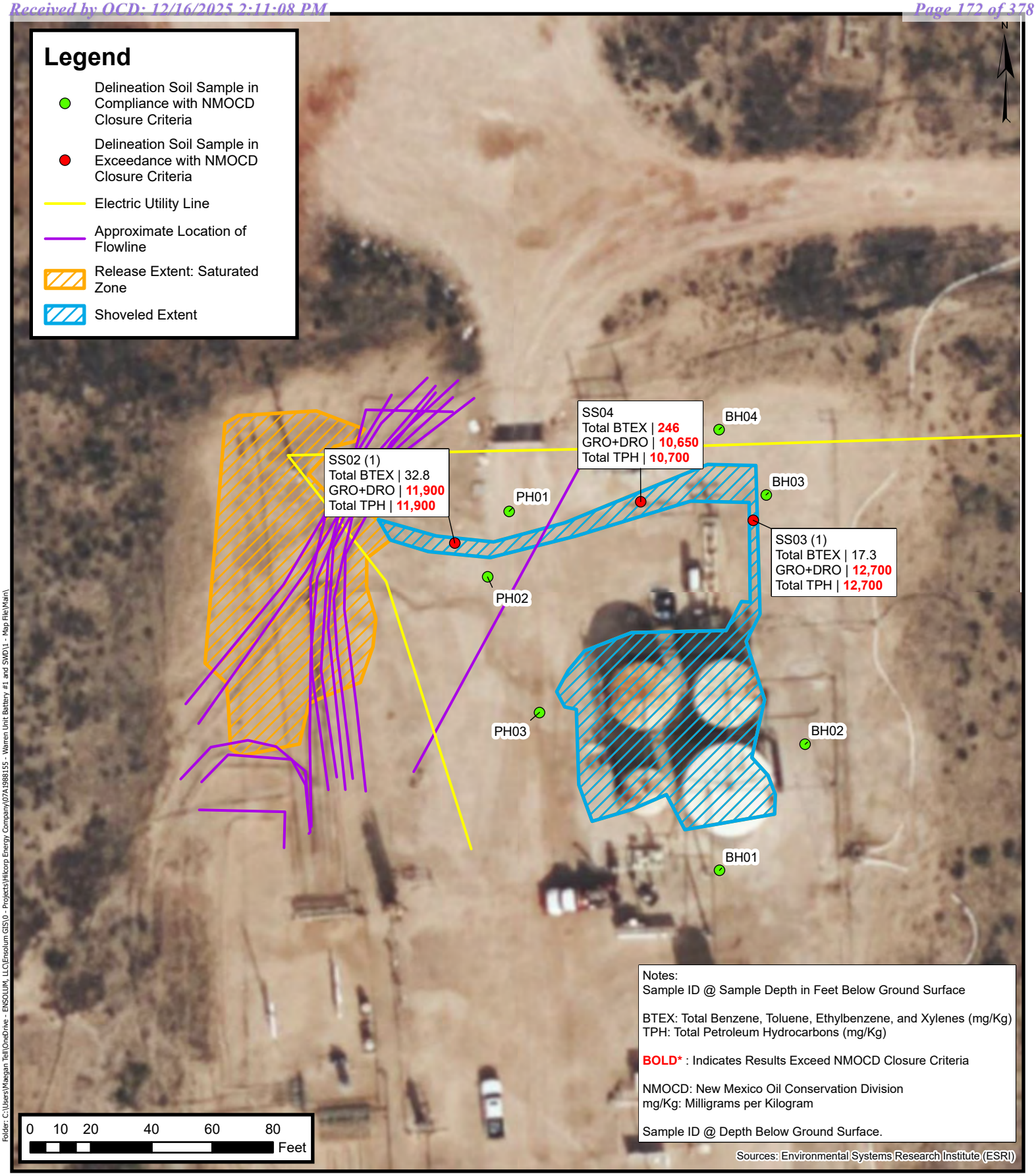
Site Receptor Map

Hilcorp Energy Company
Warren Unit Battery #1 and SWD

32.530583, -103.146738
Lea County, New Mexico

FIGURE
1

Sources: Environmental Systems Research Institute (ESRI), United States Geologic Survey (USGS), United States Fish and Wildlife Service (USFWS), National Geographic Society, i-cubed



Folder: C:\Users\Maegan Tell\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Hilcorp Energy Company\07A1988155 - Warren Unit Battery #1 and SWD\1 - Map File\Main\

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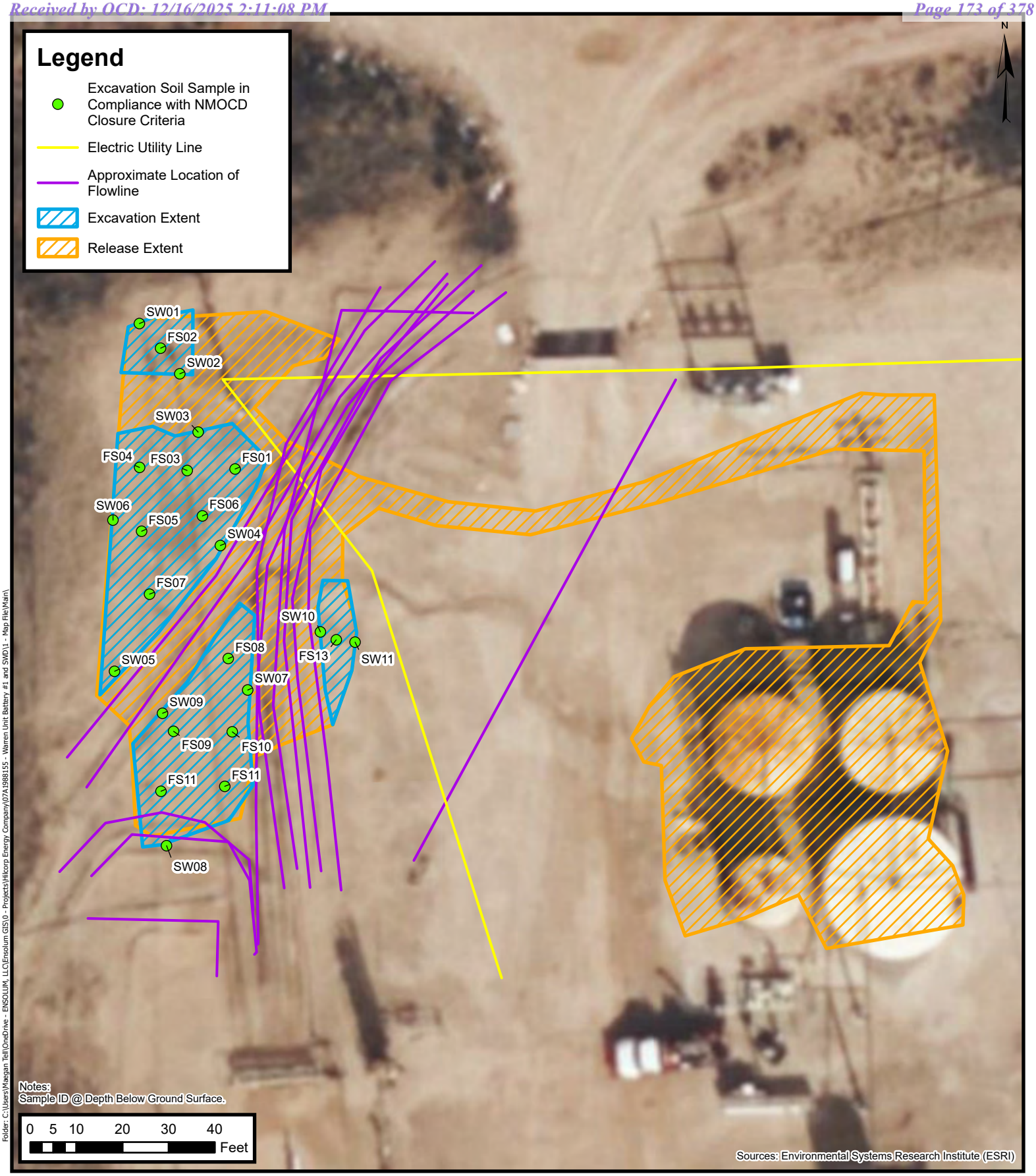
Environmental, Engineering and Hydrogeologic Consultants

Delineation Soil Sample Locations

Hilcorp Energy Company
Warren Unit Battery #1 and SWD

32.530583, -103.146738
Lea County, New Mexico

FIGURE 2



Folder: C:\Users\Maegan Tell\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Hilcorp Energy Company\07A1988155 - Warren Unit Battery #1 and SWD\1 - Map File\Main\

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Environmental, Engineering and Hydrogeologic Consultants

Excavation Soil Sample Locations

Hilcorp Energy Company
Warren Unit Battery #1 and SWD

32.530583, -103.146738
Lea County, New Mexico

FIGURE 3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Warren Unit Battery #1 & SWD
Hilcorp Energy Company
Lea County, New Mexico

Sample Identification	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**10,000**
INITIAL SOIL SAMPLES													
~~SS01~~	~~1/7/2024~~	~~0.5~~	~~**13.0**~~	~~103~~	~~82.4~~	~~169~~	~~**367**~~	~~4,210~~	~~5,720~~	~~<49.6~~	~~**9,930**~~	~~**9,930**~~	~~870~~
~~SS01A~~	~~1/7/2024~~	~~1.5~~	~~2.29~~	~~23.4~~	~~19.2~~	~~42.2~~	~~**87.1**~~	~~125~~	~~513~~	~~<49.6~~	~~638~~	~~638~~	~~1,420~~
SS02	1/7/2024	0.5	**13.2**	82.0	58.5	124	**278**	7,670	18,500	<997	**26,170**	**26,200**	794
SS03	1/7/2024	0.5	**35.6**	144	105	203	**488**	15,400	22,000	<998	**37,400**	**37,400**	886
DELINEATION SOIL SAMPLES													
BH01	01/29/2025	0.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<10.1
BH01A	01/29/2025	4.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	<10.1
BH02	01/29/2025	0.5	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	<10.1
BH02A	01/29/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	<10.1
BH03	01/29/2025	0.5	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	<9.98
BH03A	01/29/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<9.96
BH04	01/29/2025	0.5	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	<9.94
BH04A	01/29/2025	4.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<49.7	<49.7	<49.7	<49.7	<49.7	<9.98
PH01	01/29/2025	0.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<9.96
PH01A	01/29/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	<9.92
PH02	01/29/2025	0.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	<10.0
PH02A	01/29/2025	4.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	<9.94
PH03	01/29/2025	0.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	<9.92
PH03A	01/29/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	<10.1
SS02 (1)	2/24/2025	0.5	<0.101	2.54	7.45	22.9	32.8	<995	11,900	<995	**11,900**	**11,900**	623
SS03 (1)	2/24/2025	0.5	0.126	2.44	3.86	10.9	17.3	<999	12,700	<999	**12,700**	**12,700**	3,110
SS04	2/24/2025	0.5	7.23	57.2	50.3	132	**246**	3,610	7,040	<995	**10,650**	**10,700**	246
EXCAVATION FLOOR SOIL SAMPLES													
FS01	01/31/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	75.4
FS02	01/28/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	838
FS03	01/28/2025	4.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	287
FS04	01/28/2025	4.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,040
FS05	01/28/2025	4.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	673
FS06	01/28/2025	4.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	323
FS07	01/28/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	593
FS08	01/28/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	<9.96
FS09	01/28/2025	4.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	<9.90
FS10	01/28/2025	4.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	541
FS11	01/28/2025	4.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	<9.90
FS12	01/28/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	<10.1
FS13	01/29/2025	4.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<10.0
EXCAVATION SIDEWALL SOIL SAMPLES													
SW01	01/28/2025	0 - 4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	<9.92
SW02	01/28/2025	0 - 4	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	2,090
SW03	01/28/2025	0 - 4	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.8	59.0	<49.8	59.0	59.0	1,030
SW04	01/28/2025	0 - 4	<0.00200	<0.00200	<0.00200	0.00574	0.00574	<49.9	112	<49.9	112	112	565
SW05	01/28/2025	0 - 4	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	1,210
SW06	01/28/2025	0 - 4	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	84.7
SW07	01/28/2025	0 - 4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	191	<49.9	191	191	<9.94
SW08	01/28/2025	0 - 4	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	<9.98
SW09	01/28/2025	0 - 4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	43.6
SW10	01/29/2025	0 - 4	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<9.92
SW11	01/29/2025	0 - 4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<10.0

Notes:

bgs: Below ground surface
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
DRO: Diesel Range Organics
GRO: Gasoline Range Organics
mg/kg: Milligrams per kilogram
MRO: Motor Oil/Lube Oil Range Organics
NE: Not established
NMOCD: New Mexico Oil Conservation Division
PID: Photoionization detector
ppm: Parts per million
TPH: Total Petroleum Hydrocarbon
': Feet
< : Indicates result less than the stated laboratory reporting limit (RL)
*Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table I Closure Criteria for Soils Impacted by a Release*
(1): Soil samples SS02 and SS03 were resampled on 2/24/2025 after soil was removed from these areas
~~SS01/SS01A~~ : Indicates soil samples excavated to below NMOCD standards

ENSOLUM

APPENDIX A

Water Well Report

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): MW-1	OSE FILE NUMBER(S): L-13546
WELL OWNER NAME(S): Conoco Phillips	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: HC 60, Box 66	CITY: Lovington STATE: NM ZIP: 88260

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	31	25.98	N
LONGITUDE	103	8	11.85	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE: Warren Unit 13

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1456	John W. White	White Drilling Company, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
6/17/2014	6/17/2014	88.0		72.0

COMPLETED WELL IS: ( ) ARTESIAN ( ) DRY HOLE (•) SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): 75.88

DRILLING FLUID: (•) AIR ( ) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ( ) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0.0	56.0	6.0	Sch. 40 PVC	Threads	2.0	1/4"	
56.0	86.0	6.0	Sch. 40 PVC	Threads	2.0	1/4"	.010

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
52.0	88.0	6.0	20/40 Sand	12 Sacks	Hand Mix
52.0	48.0	6.0	Bentonite Chips	6 Sacks	Hand Mix
48.0	8.0	6.0	Type 2 Portland Cement w/5% Bentonite	6.52 Gal.	Pump Mix w/Tremm
8.0	0.0	6.0	Cement	1.5976	Pump Mix w/Tremm

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

543306

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0.0	14.0	14.0	Light Brown Sand	○ Y ◉ N	
14.0	23.0	9.0	Yellowish & whiteish layers of tight packed sand	○ Y ◉ N	
23.0	47.0	24.0	Pinkish brown sand	○ Y ◉ N	
47.0	73.0	26.0	Reddish brown sand/sandstone	○ Y ◉ N	
73.0	88.0	15.0	Reddish sandy shale/clay	◉ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
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				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

William B. Atkins

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER / PRINT SIGNEE NAME

7-1-14
DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2

ENSOLUM

APPENDIX B

Agency Correspondence

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 416829
Date: Friday, January 3, 2025 2:33:05 PM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Stuart Hyde for HILCORP ENERGY COMPANY),

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2500352359,
with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2500352359, on all subsequent C-141 submissions and communications regarding the remediation of this release.
NOTE: As of December 2019, NMOCD has discontinued the use of the “RP” number.
If you have any questions regarding this application, or don't know why you have received this email, please contact us.

ocd.enviro@state.nm.us

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

From: OCDOnline@state.nm.us
To: Stuart Hyde
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 418588
Date: Thursday, January 9, 2025 7:16:50 AM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Stuart Hyde for HILCORP ENERGY COMPANY),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2500352359, with the following conditions:

- **None**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Nelson Velez
Environmental Specialist - Advanced
505-469-6146
Nelson.Velez@emnrd.nm.gov

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

From: Stuart Hyde
To: Fatima Smith
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 421265
Date: Wednesday, January 15, 2025 3:26:29 PM
Attachments: image001.png
image002.png
image003.png

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

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From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, January 15, 2025 3:23 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 421265

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Stuart Hyde for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2500352359.

The sampling event is expected to take place:

When: 01/20/2025 @ 09:00
Where: H-33-20S-38E 0 FNL 0 FEL (32.530583,-103.146738)

Additional Information: Contact PM Fatima Smith, 575-725-1196

Additional Instructions: Warren Unit Battery #1 and SWD pad, coordinates 32.530583, -103.146738

This notification is to alert OCD of sampling that will occur from Monday January 20, 2025, through Friday January 24, 2025.

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

From:	Velez, Nelson, EMNRD
To:	Stuart Hyde
Cc:	Fatima Smith; Devin Hencmann; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD
Subject:	Re: [EXTERNAL] nAPP2500352359 - Warren Unit Battery #1 and SWD Sampling Notification Variance Request
Date:	Tuesday, January 14, 2025 1:04:56 PM
Attachments:	image001.png image002.png image003.png image005.jpg Outlook-1d2bmbzg.png

[**EXTERNAL EMAIL**]

Good afternoon Stuart,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC or from an OCD pre-approved sampling plan. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

Nelson Velez • **Environmental Specialist - Adv**
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Stuart Hyde <shyde@ensolum.com>
Sent: Tuesday, January 14, 2025 11:49 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Fatima Smith <fsmith@ensolum.com>; Devin Hencmann <dhencmann@ensolum.com>
Subject: [EXTERNAL] nAPP2500352359 - Warren Unit Battery #1 and SWD Sampling Notification Variance Request

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

Nelson,

On behalf of Hilcorp Energy Company, we are requesting a variance from the 2-business day sampling notification requirement outlined in 19.15.29.12(D)(1)(a) NMAC to allow soil sampling to begin on Wednesday January 15, 2025 at the Warren Unit Battery #1 and SWD site. Due to the availability of contractors, we are wanting to start digging at the site tomorrow in order to expedite the cleanup process.

Please reach out if you have any questions or concerns. Thanks and talk to you soon.

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

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From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, January 14, 2025 11:17 AM
To: Fatima Smith <fsmith@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 420470

[**EXTERNAL EMAIL**]
To whom it may concern (c/o Fatima Smith for HILCORP ENERGY COMPANY),
The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2500352359.

The sampling event is expected to take place:

When: 01/15/2025 @ 08:00
Where: H-33-20S-38E 0 FNL 0 FEL (32.530583,-103.146738)

Additional Information: Contact PM Fatima Smith, 575-725-1196

Sampling will occur on Wednesday January 15 through Friday January 17, 2025

Additional Instructions: Warren Unit Battery #1 and SWD pad, coordinates 32.530583, -103.146738

Due to the availability of contractors, we are requesting a variance from the 2-business day sampling notification requirement outlined in 19.15.29.12(D)(1)(a) NMAC to allow soil sampling to begin on Wednesday January 15, 2025

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

From: Velez, Nelson, EMNRD
To: Stuart Hyde
Cc: Billy Ginn; Fatima Smith; Devin Hencmann; Enviro, OCD, EMNRD
Subject: Re: [EXTERNAL] nAPP2500352359 - Warren Unit Battery #1 & SWD Closure Criteria
Date: Friday, January 17, 2025 2:33:49 PM
Attachments: image001.png
image002.png
image003.png
Outlook-yruua5sa.png

[**EXTERNAL EMAIL**]
Good afternoon Stuart,

Thank you for your inquiry. I do concur with your evaluation for the depth of water estimation and using the applicable Table I Closure Criteria of Groundwater 51-100 feet below grade.

Regards,

Nelson Velez • **Environmental Specialist - Adv**
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Stuart Hyde <shyde@ensolum.com>
Sent: Friday, January 17, 2025 11:06 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Devin Hencmann <dhencmann@ensolum.com>; Fatima Smith <fsmith@ensolum.com>; Billy Ginn <William.Ginn@hilcorp.com>
Subject: [EXTERNAL] nAPP2500352359 - Warren Unit Battery #1 & SWD Closure Criteria

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

Nelson,

We are assisting Hilcorp with the Warren Unit Battery #1 & SWD site, Incident ID nAPP2500352359. Hilcorp is currently spotting utilities with a hydrovac this week and will be conducting excavation and sampling work next week, likely starting Monday. To guide the excavation effort, we would like to

get the NMOCD's concurrence on the Table I Closure Criteria. We have prepared the attached site characterization spreadsheet outlining the nearby sensitive receptors and figures showing the site location.

Please reach out if you have any questions regarding the presented information and/or site. Thanks so much and have a good weekend.

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

From: OCDOnline@state.nm.us
To: Fatima Smith
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 423713
Date: Wednesday, January 22, 2025 2:14:22 PM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Fatima Smith for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2500352359.

The sampling event is expected to take place:

When: 01/27/2025 @ 09:00
Where: H-33-20S-38E 0 FNL 0 FEL (32.530583,-103.146738)

Additional Information: Contact PM Fatima Smith, 575-725-1196

Additional Instructions: Warren Unit Battery #1 and SWD pad, coordinates 32.530583, -103.146738

This notification is to alert OCD of sampling that will occur from Monday January 27, 2025, through Wednesday January 29, 2025.

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

From: OCDOnline@state.nm.us
To: Fatima Smith
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 425381
Date: Monday, January 27, 2025 5:01:56 PM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Fatima Smith for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2500352359.

The sampling event is expected to take place:

When: 01/30/2025 @ 09:00
Where: H-33-20S-38E 0 FNL 0 FEL (32.530583,-103.146738)

Additional Information: Contact PM Fatima Smith, 575-725-1196

Additional Instructions: Warren Unit Battery #1 and SWD pad, coordinates 32.530583, -103.146738

This notification is to alert OCD of sampling that will occur from Thursday 1/30/2025 to Friday 1/31/2025.

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

From: OCDOnline@state.nm.us
To: Fatima Smith
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 433586
Date: Wednesday, February 19, 2025 12:45:27 PM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Fatima Smith for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2500352359.

The sampling event is expected to take place:

When: 02/24/2025 @ 10:00
Where: H-33-20S-38E 0 FNL 0 FEL (32.530583,-103.146738)

Additional Information: Contact PM Fatima Smith, 575-725-1196

Additional Instructions: Warren Unit Battery #1 and SWD pad, coordinates 32.530583, -103.146738

This notification is to alert OCD of sampling that will occur Monday 2/24/2025

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

From: OCDOnline@state.nm.us
To: Fatima Smith
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 420470
Date: Tuesday, January 14, 2025 11:17:17 AM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Fatima Smith for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2500352359.

The sampling event is expected to take place:

When: 01/15/2025 @ 08:00
Where: H-33-20S-38E 0 FNL 0 FEL (32.530583,-103.146738)

Additional Information: Contact PM Fatima Smith, 575-725-1196

Sampling will occur on Wednesday January 15 through Friday January 17, 2025

Additional Instructions: Warren Unit Battery #1 and SWD pad, coordinates 32.530583, -103.146738

Due to the availability of contractors, we are requesting a variance from the 2-business day sampling notification requirement outlined in 19.15.29.12(D)(1)(a) NMAC to allow soil sampling to begin on Wednesday January 15, 2025

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

ENSOLUM

APPENDIX C

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devin Hencmann
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/9/2025 11:16:42 AM

JOB DESCRIPTION

Warren Unit Battery #1
07A1988155

JOB NUMBER

890-7551-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

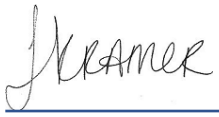
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
1/9/2025 11:16:42 AM

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

Client: Ensolum
Project/Site: Warren Unit Battery #1

Laboratory Job ID: 890-7551-1
SDG: 07A1988155

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-7551-1
Project/Site: Warren Unit Battery #1 SDG: 07A1988155

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum Job ID: 890-7551-1
Project: Warren Unit Battery #1

Job ID: 890-7551-1 Eurofins Carlsbad

Job Narrative
890-7551-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/8/2025 9:56 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 0.0°C.

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-7551-1), SS03 (890-7551-4) and (890-7548-A-1-E MSD). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-99840 and analytical batch 880-99755 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.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: SS01 (890-7551-1), SS01A (890-7551-2) and SS02 (890-7551-3). Elevated reporting limits (RLs) are provided.

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

Diesel Range Organics
Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-99851 and analytical batch 880-99796 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike(MS) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-99851 and analytical batch 880-99796 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike(MS) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (LCS 880-99851/2-A) and (LCSD 880-99851/3-A). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries and precision for preparation batch 880-99851 and analytical batch 880-99796 was outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS01 (890-7551-1), SS02 (890-7551-3), SS03 (890-7551-4) and (890-7545-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Client Sample ID: SS01

Lab Sample ID: 890-7551-1
Matrix: Solid
Date Collected: 01/07/25 12:25
Date Received: 01/08/25 09:56
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	13.0		1.99		mg/Kg		01/08/25 15:47	01/09/25 04:53	1000
Toluene	103		1.99		mg/Kg		01/08/25 15:47	01/09/25 04:53	1000
Ethylbenzene	82.4		1.99		mg/Kg		01/08/25 15:47	01/09/25 04:53	1000
m-Xylene & p-Xylene	119		3.98		mg/Kg		01/08/25 15:47	01/09/25 04:53	1000
o-Xylene	49.6		1.99		mg/Kg		01/08/25 15:47	01/09/25 04:53	1000
Xylenes, Total	169		3.98		mg/Kg		01/08/25 15:47	01/09/25 04:53	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*01/08/25 15:47*	*01/09/25 04:53*	*1000*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*01/08/25 15:47*	*01/09/25 04:53*	*1000*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	367		3.98		mg/Kg			01/09/25 04:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	9930		49.6		mg/Kg			01/09/25 02:21	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	4210	*+	49.6		mg/Kg		01/08/25 16:29	01/09/25 02:21	1
Diesel Range Organics (Over C10-C28)	5720	*+	49.6		mg/Kg		01/08/25 16:29	01/09/25 02:21	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		01/08/25 16:29	01/09/25 02:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*01/08/25 16:29*	*01/09/25 02:21*	*1*
o-Terphenyl	*172*	*S1+*	*70 - 130*	*01/08/25 16:29*	*01/09/25 02:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	870		10.0		mg/Kg			01/09/25 00:08	1

Client Sample ID: SS01A

Lab Sample ID: 890-7551-2
Matrix: Solid
Date Collected: 01/07/25 12:30
Date Received: 01/08/25 09:56
Sample Depth: 1.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.29		2.01		mg/Kg		01/08/25 15:47	01/09/25 05:13	1000
Toluene	23.4		2.01		mg/Kg		01/08/25 15:47	01/09/25 05:13	1000
Ethylbenzene	19.2		2.01		mg/Kg		01/08/25 15:47	01/09/25 05:13	1000
m-Xylene & p-Xylene	31.7		4.02		mg/Kg		01/08/25 15:47	01/09/25 05:13	1000
o-Xylene	10.5		2.01		mg/Kg		01/08/25 15:47	01/09/25 05:13	1000
Xylenes, Total	42.2		4.02		mg/Kg		01/08/25 15:47	01/09/25 05:13	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*01/08/25 15:47*	*01/09/25 05:13*	*1000*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Client Sample ID: SS01A

Date Collected: 01/07/25 12:30
Date Received: 01/08/25 09:56
Sample Depth: 1.5

Lab Sample ID: 890-7551-2
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/08/25 15:47*	*01/09/25 05:13*	*1000*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**87.1**		4.02		mg/Kg			01/09/25 05:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**638**		49.6		mg/Kg			01/09/25 02:37	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	**125**	***+**	49.6		mg/Kg		01/08/25 16:29	01/09/25 02:37	1
Diesel Range Organics (Over C10-C28)	**513**	***+**	49.6		mg/Kg		01/08/25 16:29	01/09/25 02:37	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		01/08/25 16:29	01/09/25 02:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*79*		*70 - 130*	*01/08/25 16:29*	*01/09/25 02:37*	*1*
o-Terphenyl	*78*		*70 - 130*	*01/08/25 16:29*	*01/09/25 02:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1420**		9.94		mg/Kg			01/09/25 00:14	1

Client Sample ID: SS02

Date Collected: 01/07/25 14:10
Date Received: 01/08/25 09:56
Sample Depth: 0.5

Lab Sample ID: 890-7551-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**13.2**		2.00		mg/Kg		01/08/25 15:47	01/09/25 05:34	1000
Toluene	**82.0**		2.00		mg/Kg		01/08/25 15:47	01/09/25 05:34	1000
Ethylbenzene	**58.5**		2.00		mg/Kg		01/08/25 15:47	01/09/25 05:34	1000
m-Xylene & p-Xylene	**89.5**		4.00		mg/Kg		01/08/25 15:47	01/09/25 05:34	1000
o-Xylene	**34.9**		2.00		mg/Kg		01/08/25 15:47	01/09/25 05:34	1000
Xylenes, Total	**124**		4.00		mg/Kg		01/08/25 15:47	01/09/25 05:34	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*01/08/25 15:47*	*01/09/25 05:34*	*1000*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/08/25 15:47*	*01/09/25 05:34*	*1000*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**278**		4.00		mg/Kg			01/09/25 05:34	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**26200**		997		mg/Kg			01/09/25 02:52	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Client Sample ID: SS02

Lab Sample ID: 890-7551-3
Matrix: Solid
Date Collected: 01/07/25 14:10
Date Received: 01/08/25 09:56
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	7670	*+	997		mg/Kg		01/08/25 16:29	01/09/25 02:52	20
Diesel Range Organics (Over C10-C28)	18500	*+	997		mg/Kg		01/08/25 16:29	01/09/25 02:52	20
Oil Range Organics (Over C28-C36)	<997	U	997		mg/Kg		01/08/25 16:29	01/09/25 02:52	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*369*	*S1+*	*70 - 130*	*01/08/25 16:29*	*01/09/25 02:52*	*20*
o-Terphenyl	*466*	*S1+*	*70 - 130*	*01/08/25 16:29*	*01/09/25 02:52*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	794		10.1		mg/Kg			01/09/25 00:19	1

Client Sample ID: SS03

Lab Sample ID: 890-7551-4
Matrix: Solid
Date Collected: 01/07/25 14:15
Date Received: 01/08/25 09:56
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	35.6		1.99		mg/Kg		01/08/25 15:47	01/09/25 05:54	1000
Toluene	144		1.99		mg/Kg		01/08/25 15:47	01/09/25 05:54	1000
Ethylbenzene	105		1.99		mg/Kg		01/08/25 15:47	01/09/25 05:54	1000
m-Xylene & p-Xylene	141		3.98		mg/Kg		01/08/25 15:47	01/09/25 05:54	1000
o-Xylene	62.4		1.99		mg/Kg		01/08/25 15:47	01/09/25 05:54	1000
Xylenes, Total	203		3.98		mg/Kg		01/08/25 15:47	01/09/25 05:54	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*01/08/25 15:47*	*01/09/25 05:54*	*1000*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*01/08/25 15:47*	*01/09/25 05:54*	*1000*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	488		3.98		mg/Kg			01/09/25 05:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	37400		998		mg/Kg			01/09/25 03:06	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	15400	*+	998		mg/Kg		01/08/25 16:29	01/09/25 03:06	20
Diesel Range Organics (Over C10-C28)	22000	*+	998		mg/Kg		01/08/25 16:29	01/09/25 03:06	20
Oil Range Organics (Over C28-C36)	<998	U	998		mg/Kg		01/08/25 16:29	01/09/25 03:06	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*651*	*S1+*	*70 - 130*	*01/08/25 16:29*	*01/09/25 03:06*	*20*
o-Terphenyl	*500*	*S1+*	*70 - 130*	*01/08/25 16:29*	*01/09/25 03:06*	*20*

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Client Sample ID: SS03
Date Collected: 01/07/25 14:15
Date Received: 01/08/25 09:56
Sample Depth: 0.5

Lab Sample ID: 890-7551-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	886		10.0		mg/Kg			01/09/25 00:36	1

Surrogate Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7548-A-1-D MS	Matrix Spike	116	94
890-7548-A-1-E MSD	Matrix Spike Duplicate	153 S1+	115
890-7551-1	SS01	137 S1+	96
890-7551-2	SS01A	112	97
890-7551-3	SS02	128	101
890-7551-4	SS03	136 S1+	104
LCS 880-99840/1-A	Lab Control Sample	118	96
LCSD 880-99840/2-A	Lab Control Sample Dup	101	95
MB 880-99776/5-A	Method Blank	98	92
MB 880-99840/5-A	Method Blank	98	92

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7545-A-1-E MS	Matrix Spike	115	142 S1+
890-7545-A-1-F MSD	Matrix Spike Duplicate	134 S1+	162 S1+
890-7551-1	SS01	147 S1+	172 S1+
890-7551-2	SS01A	79	78
890-7551-3	SS02	369 S1+	466 S1+
890-7551-4	SS03	651 S1+	500 S1+
LCS 880-99851/2-A	Lab Control Sample	156 S1+	144 S1+
LCSD 880-99851/3-A	Lab Control Sample Dup	147 S1+	139 S1+
MB 880-99851/1-A	Method Blank	122	124

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-99776/5-A
Matrix: Solid
Analysis Batch: 99755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 99776

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/08/25 10:12	01/08/25 12:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/08/25 10:12	01/08/25 12:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/08/25 10:12	01/08/25 12:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/08/25 10:12	01/08/25 12:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/08/25 10:12	01/08/25 12:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/08/25 10:12	01/08/25 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*01/08/25 10:12*	*01/08/25 12:12*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*01/08/25 10:12*	*01/08/25 12:12*	*1*

Lab Sample ID: MB 880-99840/5-A
Matrix: Solid
Analysis Batch: 99755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 99840

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/08/25 15:47	01/08/25 23:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/08/25 15:47	01/08/25 23:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/08/25 15:47	01/08/25 23:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/08/25 15:47	01/08/25 23:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/08/25 15:47	01/08/25 23:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/08/25 15:47	01/08/25 23:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*01/08/25 15:47*	*01/08/25 23:12*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*01/08/25 15:47*	*01/08/25 23:12*	*1*

Lab Sample ID: LCS 880-99840/1-A
Matrix: Solid
Analysis Batch: 99755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99840

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1100		mg/Kg		110	70 - 130		
Toluene			0.100	0.1172		mg/Kg		117	70 - 130		
Ethylbenzene			0.100	0.1157		mg/Kg		116	70 - 130		
m-Xylene & p-Xylene			0.200	0.2219		mg/Kg		111	70 - 130		
o-Xylene			0.100	0.1215		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-99840/2-A
Matrix: Solid
Analysis Batch: 99755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 99840

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	5	35

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

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

Lab Sample ID: LCSD 880-99840/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 99755 — **Prep Batch: 99840**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1145		mg/Kg		115	70 - 130	2	35
Ethylbenzene			0.100	0.1135		mg/Kg		114	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2145		mg/Kg		107	70 - 130	3	35
o-Xylene			0.100	0.1171		mg/Kg		117	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-7548-A-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 99755 — **Prep Batch: 99840**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.00203	F1	0.100	0.1071		mg/Kg		105	70 - 130
Toluene	0.00420	F1	0.100	0.1161		mg/Kg		112	70 - 130
Ethylbenzene	<0.00202	U F1	0.100	0.1085		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	<0.00404	U F2 F1	0.200	0.2077		mg/Kg		104	70 - 130
o-Xylene	<0.00202	U F1	0.100	0.1124		mg/Kg		112	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 890-7548-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 99755 — **Prep Batch: 99840**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.00203	F1	0.100	0.1405	F1	mg/Kg		138	70 - 130	27	35
Toluene	0.00420	F1	0.100	0.1485	F1	mg/Kg		144	70 - 130	24	35
Ethylbenzene	<0.00202	U F1	0.100	0.1517	F1	mg/Kg		152	70 - 130	33	35
m-Xylene & p-Xylene	<0.00404	U F2 F1	0.200	0.3448	F1 F2	mg/Kg		172	70 - 130	50	35
o-Xylene	<0.00202	U F1	0.100	0.1397	F1	mg/Kg		140	70 - 130	22	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

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

Lab Sample ID: MB 880-99851/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 99796 — **Prep Batch: 99851**

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		01/08/25 16:29	01/08/25 17:26	1

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

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

Lab Sample ID: MB 880-99851/1-A
Matrix: Solid
Analysis Batch: 99796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 99851

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		01/08/25 16:29	01/08/25 17:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/08/25 16:29	01/08/25 17:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*01/08/25 16:29*	*01/08/25 17:26*	*1*
o-Terphenyl	*124*		*70 - 130*	*01/08/25 16:29*	*01/08/25 17:26*	*1*

Lab Sample ID: LCS 880-99851/2-A
Matrix: Solid
Analysis Batch: 99796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99851

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1363	*+	mg/Kg		136	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1434	*+	mg/Kg		143	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*156*	*S1+*	*70 - 130*
o-Terphenyl	*144*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-99851/3-A
Matrix: Solid
Analysis Batch: 99796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 99851

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1227		mg/Kg		123	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	1367	*+	mg/Kg		137	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*147*	*S1+*	*70 - 130*
o-Terphenyl	*139*	*S1+*	*70 - 130*

Lab Sample ID: 890-7545-A-1-E MS
Matrix: Solid
Analysis Batch: 99796

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 99851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1150	*+	1000	1861		mg/Kg		71	70 - 130		
Diesel Range Organics (Over C10-C28)	4510	*+	1000	5334	4	mg/Kg		82	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*142*	*S1+*	*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

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

Lab Sample ID: 890-7545-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 99796 — **Prep Batch: 99851**

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	1150	*+	1000	2150		mg/Kg		100	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	4510	*+	1000	6044	4	mg/Kg		153	70 - 130	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*134*	*S1+*	*70 - 130*
o-Terphenyl	*162*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-99853/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 99855

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/08/25 22:43	1

Lab Sample ID: LCS 880-99853/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 99855

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	266.5		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-99853/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 99855

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	266.0		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-7551-3 MS — **Client Sample ID: SS02**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 99855

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	794		252	1049		mg/Kg		101	90 - 110		

Lab Sample ID: 890-7551-3 MSD — **Client Sample ID: SS02**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 99855

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	794		252	1049		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

GC VOA

Analysis Batch: 99755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-1	SS01	Total/NA	Solid	8021B	99840
890-7551-2	SS01A	Total/NA	Solid	8021B	99840
890-7551-3	SS02	Total/NA	Solid	8021B	99840
890-7551-4	SS03	Total/NA	Solid	8021B	99840
MB 880-99776/5-A	Method Blank	Total/NA	Solid	8021B	99776
MB 880-99840/5-A	Method Blank	Total/NA	Solid	8021B	99840
LCS 880-99840/1-A	Lab Control Sample	Total/NA	Solid	8021B	99840
LCSD 880-99840/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	99840
890-7548-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	99840
890-7548-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	99840

Prep Batch: 99776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-99776/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 99840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-1	SS01	Total/NA	Solid	5035	
890-7551-2	SS01A	Total/NA	Solid	5035	
890-7551-3	SS02	Total/NA	Solid	5035	
890-7551-4	SS03	Total/NA	Solid	5035	
MB 880-99840/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-99840/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-99840/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7548-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-7548-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 99895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-1	SS01	Total/NA	Solid	Total BTEX	
890-7551-2	SS01A	Total/NA	Solid	Total BTEX	
890-7551-3	SS02	Total/NA	Solid	Total BTEX	
890-7551-4	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 99796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-1	SS01	Total/NA	Solid	8015B NM	99851
890-7551-2	SS01A	Total/NA	Solid	8015B NM	99851
890-7551-3	SS02	Total/NA	Solid	8015B NM	99851
890-7551-4	SS03	Total/NA	Solid	8015B NM	99851
MB 880-99851/1-A	Method Blank	Total/NA	Solid	8015B NM	99851
LCS 880-99851/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	99851
LCSD 880-99851/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	99851
890-7545-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	99851
890-7545-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	99851

Prep Batch: 99851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-1	SS01	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

GC Semi VOA (Continued)

Prep Batch: 99851 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-2	SS01A	Total/NA	Solid	8015NM Prep	
890-7551-3	SS02	Total/NA	Solid	8015NM Prep	
890-7551-4	SS03	Total/NA	Solid	8015NM Prep	
MB 880-99851/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-99851/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-99851/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7545-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-7545-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 99952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-1	SS01	Total/NA	Solid	8015 NM	
890-7551-2	SS01A	Total/NA	Solid	8015 NM	
890-7551-3	SS02	Total/NA	Solid	8015 NM	
890-7551-4	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 99853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-1	SS01	Soluble	Solid	DI Leach	
890-7551-2	SS01A	Soluble	Solid	DI Leach	
890-7551-3	SS02	Soluble	Solid	DI Leach	
890-7551-4	SS03	Soluble	Solid	DI Leach	
MB 880-99853/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-99853/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-99853/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7551-3 MS	SS02	Soluble	Solid	DI Leach	
890-7551-3 MSD	SS02	Soluble	Solid	DI Leach	

Analysis Batch: 99855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7551-1	SS01	Soluble	Solid	300.0	99853
890-7551-2	SS01A	Soluble	Solid	300.0	99853
890-7551-3	SS02	Soluble	Solid	300.0	99853
890-7551-4	SS03	Soluble	Solid	300.0	99853
MB 880-99853/1-A	Method Blank	Soluble	Solid	300.0	99853
LCS 880-99853/2-A	Lab Control Sample	Soluble	Solid	300.0	99853
LCSD 880-99853/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	99853
890-7551-3 MS	SS02	Soluble	Solid	300.0	99853
890-7551-3 MSD	SS02	Soluble	Solid	300.0	99853

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Client Sample ID: SS01
Date Collected: 01/07/25 12:25
Date Received: 01/08/25 09:56

Lab Sample ID: 890-7551-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	99840	01/08/25 15:47	MNR	EET MID
Total/NA	Analysis	8021B		1000	5 mL	5 mL	99755	01/09/25 04:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			99895	01/09/25 04:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			99952	01/09/25 02:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	99851	01/08/25 16:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	99796	01/09/25 02:21	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	99853	01/08/25 16:33	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	99855	01/09/25 00:08	CH	EET MID

Client Sample ID: SS01A
Date Collected: 01/07/25 12:30
Date Received: 01/08/25 09:56

Lab Sample ID: 890-7551-2
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	99840	01/08/25 15:47	MNR	EET MID
Total/NA	Analysis	8021B		1000	5 mL	5 mL	99755	01/09/25 05:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			99895	01/09/25 05:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			99952	01/09/25 02:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	99851	01/08/25 16:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	99796	01/09/25 02:37	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	99853	01/08/25 16:33	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	99855	01/09/25 00:14	CH	EET MID

Client Sample ID: SS02
Date Collected: 01/07/25 14:10
Date Received: 01/08/25 09:56

Lab Sample ID: 890-7551-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	99840	01/08/25 15:47	MNR	EET MID
Total/NA	Analysis	8021B		1000	5 mL	5 mL	99755	01/09/25 05:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			99895	01/09/25 05:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			99952	01/09/25 02:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	99851	01/08/25 16:29	TKC	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	99796	01/09/25 02:52	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	99853	01/08/25 16:33	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	99855	01/09/25 00:19	CH	EET MID

Client Sample ID: SS03
Date Collected: 01/07/25 14:15
Date Received: 01/08/25 09:56

Lab Sample ID: 890-7551-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	99840	01/08/25 15:47	MNR	EET MID
Total/NA	Analysis	8021B		1000	5 mL	5 mL	99755	01/09/25 05:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			99895	01/09/25 05:54	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Client Sample ID: SS03

Date Collected: 01/07/25 14:15
Date Received: 01/08/25 09:56

Lab Sample ID: 890-7551-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			99952	01/09/25 03:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	99851	01/08/25 16:29	TKC	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	99796	01/09/25 03:06	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	99853	01/08/25 16:33	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	99855	01/09/25 00:36	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: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

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	06-30-25

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: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

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: Warren Unit Battery #1

Job ID: 890-7551-1
SDG: 07A1988155

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7551-1	SS01	Solid	01/07/25 12:25	01/08/25 09:56	0.5
890-7551-2	SS01A	Solid	01/07/25 12:30	01/08/25 09:56	1.5
890-7551-3	SS02	Solid	01/07/25 14:10	01/08/25 09:56	0.5
890-7551-4	SS03	Solid	01/07/25 14:15	01/08/25 09:56	0.5

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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

www.xenco.com Page 1 of 1

W 890-7551 Chain of Custody

Project Manager:	Devin Hencmann	Bill to: (if different)	
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	dhencmann@ensolum.com

Work Order Comments

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

Project Name:	Warren Unit Battery #1	Turn Around	
Project Number:	07A1988155	☐ Routine ☑ Rush	
Project Location:		Due Date:	24H
Sampler's Name:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	T#1
Cooler Custody Seals:	Yes No N/A	Correction Factor:	+0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-0.1
Total Containers:		Corrected Temperature:	0.0

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
SS01	S	1-7-24	1225	0.5	G	1				
SS01A			1230	1.5						
SS02			1410	0.5						
SS03			1415	0.5						

Sample Comments

Incident ID: nAPP2500352359
Cost Center:
AFE:

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 SiO2 Na Sr Tl Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9.26	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7551-1
SDG Number: 07A1988155

Login Number: 7551
List Number: 1
Creator: Lopez, Abraham

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: 890-7551-1
SDG Number: 07A1988155

Login Number: 7551
List Number: 2
Creator: Rios, Minerva

List Source: Eurofins Midland
List Creation: 01/08/25 10:05 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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Devin Hencmann
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/24/2025 2:23:50 PM

JOB DESCRIPTION

Warren Unit Battery #1
07A1988155

JOB NUMBER

890-7595-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

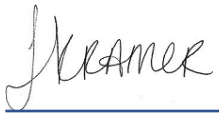
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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



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1/24/2025 2:23:50 PM

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

Client: Ensolum
Project/Site: Warren Unit Battery #1

Laboratory Job ID: 890-7595-1
SDG: 07A1988155

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-7595-1
Project/Site: Warren Unit Battery #1 SDG: 07A1988155

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
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 Job ID: 890-7595-1
Project: Warren Unit Battery #1

Job ID: 890-7595-1 Eurofins Carlsbad

Job Narrative
890-7595-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 1/23/2025 1:36 PM. 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 1.2°C.

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: FS01 (890-7595-1).

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

Diesel Range Organics
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: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

Client Sample ID: FS01

Date Collected: 01/23/25 11:45
Date Received: 01/23/25 13:36
Sample Depth: 4

Lab Sample ID: 890-7595-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/25 08:53	01/24/25 12:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/25 08:53	01/24/25 12:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/25 08:53	01/24/25 12:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/24/25 08:53	01/24/25 12:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/25 08:53	01/24/25 12:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/24/25 08:53	01/24/25 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*01/24/25 08:53*	*01/24/25 12:06*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*01/24/25 08:53*	*01/24/25 12:06*	*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			01/24/25 12:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			01/24/25 09:42	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		01/24/25 08:11	01/24/25 09:42	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/24/25 08:11	01/24/25 09:42	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/24/25 08:11	01/24/25 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*01/24/25 08:11*	*01/24/25 09:42*	*1*
o-Terphenyl	*85*		*70 - 130*	*01/24/25 08:11*	*01/24/25 09:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.4**		2.01		mg/Kg			01/24/25 11:36	1

Surrogate Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7595-1	FS01	89	109
890-7595-1 MS	FS01	93	128
890-7595-1 MSD	FS01	90	127
LCS 880-101104/1-A	Lab Control Sample	92	127
LCSD 880-101104/2-A	Lab Control Sample Dup	92	129
MB 880-101104/5-A	Method Blank	88	103

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7595-1	FS01	85	85
890-7595-1 MS	FS01	86	83
890-7595-1 MSD	FS01	85	81
LCS 880-101079/2-A	Lab Control Sample	118	110
LCSD 880-101079/3-A	Lab Control Sample Dup	106	99
MB 880-101079/1-A	Method Blank	88	88

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-101104/5-A
Matrix: Solid
Analysis Batch: 101088

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 101104

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/25 08:53	01/24/25 11:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/25 08:53	01/24/25 11:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/25 08:53	01/24/25 11:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/24/25 08:53	01/24/25 11:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/25 08:53	01/24/25 11:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/24/25 08:53	01/24/25 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*01/24/25 08:53*	*01/24/25 11:44*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*01/24/25 08:53*	*01/24/25 11:44*	*1*

Lab Sample ID: LCS 880-101104/1-A
Matrix: Solid
Analysis Batch: 101088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101104

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09541		mg/Kg		95	70 - 130		
Toluene			0.100	0.08457		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.09428		mg/Kg		94	70 - 130		
m-Xylene & p-Xylene			0.200	0.1936		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09476		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*127*		*70 - 130*

Lab Sample ID: LCSD 880-101104/2-A
Matrix: Solid
Analysis Batch: 101088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101104

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09828		mg/Kg		98	70 - 130	3	35
Toluene			0.100	0.08832		mg/Kg		88	70 - 130	4	35
Ethylbenzene			0.100	0.09774		mg/Kg		98	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1993		mg/Kg		100	70 - 130	3	35
o-Xylene			0.100	0.09614		mg/Kg		96	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*129*		*70 - 130*

Lab Sample ID: 890-7595-1 MS
Matrix: Solid
Analysis Batch: 101088

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 101104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.09178		mg/Kg		92	70 - 130		
Toluene	<0.00200	U	0.100	0.08112		mg/Kg		81	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

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

Lab Sample ID: 890-7595-1 MS
Matrix: Solid
Analysis Batch: 101088

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 101104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.09003		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1837		mg/Kg		92	70 - 130
o-Xylene	<0.00200	U	0.100	0.08953		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*128*		*70 - 130*

Lab Sample ID: 890-7595-1 MSD
Matrix: Solid
Analysis Batch: 101088

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 101104

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	0.09417		mg/Kg		94	70 - 130	3	35
Toluene	<0.00200	U	0.100	0.08382		mg/Kg		84	70 - 130	3	35
Ethylbenzene	<0.00200	U	0.100	0.09290		mg/Kg		93	70 - 130	3	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1902		mg/Kg		95	70 - 130	4	35
o-Xylene	<0.00200	U	0.100	0.09258		mg/Kg		93	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*127*		*70 - 130*

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

Lab Sample ID: MB 880-101079/1-A
Matrix: Solid
Analysis Batch: 101107

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 101079

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		01/24/25 08:11	01/24/25 01:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/25 08:11	01/24/25 01:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/25 08:11	01/24/25 01:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*01/24/25 08:11*	*01/24/25 01:07*	*1*
o-Terphenyl	*88*		*70 - 130*	*01/24/25 08:11*	*01/24/25 01:07*	*1*

Lab Sample ID: LCS 880-101079/2-A
Matrix: Solid
Analysis Batch: 101107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101079

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	848.3		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1033		mg/Kg		103	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

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

Lab Sample ID: LCS 880-101079/2-A
Matrix: Solid
Analysis Batch: 101107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101079

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-101079/3-A
Matrix: Solid
Analysis Batch: 101107

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101079

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	742.5		mg/Kg		74	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	939.7		mg/Kg		94	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-7595-1 MS
Matrix: Solid
Analysis Batch: 101107

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 101079

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	999	782.5		mg/Kg		78	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.7	U	999	855.5		mg/Kg		84	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	83		70 - 130

Lab Sample ID: 890-7595-1 MSD
Matrix: Solid
Analysis Batch: 101107

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 101079

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	<49.7	U	999	808.0		mg/Kg		81	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.7	U	999	793.1		mg/Kg		78	70 - 130	8	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	81		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-101089/1-A
Matrix: Solid
Analysis Batch: 101114

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.00	U	2.00		mg/Kg			01/24/25 10:25	1

Lab Sample ID: LCS 880-101089/2-A
Matrix: Solid
Analysis Batch: 101114

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	49.89		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-101089/3-A
Matrix: Solid
Analysis Batch: 101114

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			50.0	53.46		mg/Kg		107	90 - 110	7	20

Lab Sample ID: 880-53604-A-1-B MS
Matrix: Solid
Analysis Batch: 101114

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	<2.01	U	50.2	49.01		mg/Kg		96	90 - 110		

Lab Sample ID: 880-53604-A-1-C MSD
Matrix: Solid
Analysis Batch: 101114

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	<2.01		50.2	52.57		mg/Kg		100	90 - 110	7	20

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

GC VOA

Analysis Batch: 101088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7595-1	FS01	Total/NA	Solid	8021B	101104
MB 880-101104/5-A	Method Blank	Total/NA	Solid	8021B	101104
LCS 880-101104/1-A	Lab Control Sample	Total/NA	Solid	8021B	101104
LCSD 880-101104/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	101104
890-7595-1 MS	FS01	Total/NA	Solid	8021B	101104
890-7595-1 MSD	FS01	Total/NA	Solid	8021B	101104

Prep Batch: 101104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7595-1	FS01	Total/NA	Solid	5035	
MB 880-101104/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-101104/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-101104/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7595-1 MS	FS01	Total/NA	Solid	5035	
890-7595-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 101174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7595-1	FS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 101079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7595-1	FS01	Total/NA	Solid	8015NM Prep	
MB 880-101079/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-101079/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-101079/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7595-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-7595-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 101107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7595-1	FS01	Total/NA	Solid	8015B NM	101079
MB 880-101079/1-A	Method Blank	Total/NA	Solid	8015B NM	101079
LCS 880-101079/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	101079
LCSD 880-101079/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	101079
890-7595-1 MS	FS01	Total/NA	Solid	8015B NM	101079
890-7595-1 MSD	FS01	Total/NA	Solid	8015B NM	101079

Analysis Batch: 101169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7595-1	FS01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 101089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7595-1	FS01	Soluble	Solid	DI Leach	
MB 880-101089/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-101089/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-101089/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

HPLC/IC (Continued)

Leach Batch: 101089 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53604-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-53604-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 101114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7595-1	FS01	Soluble	Solid	300.0	101089
MB 880-101089/1-A	Method Blank	Soluble	Solid	300.0	101089
LCS 880-101089/2-A	Lab Control Sample	Soluble	Solid	300.0	101089
LCSD 880-101089/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	101089
880-53604-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	101089
880-53604-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	101089

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

Client Sample ID: FS01

Date Collected: 01/23/25 11:45
Date Received: 01/23/25 13:36

Lab Sample ID: 890-7595-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	101104	01/24/25 08:53	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101088	01/24/25 12:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101174	01/24/25 12:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			101169	01/24/25 09:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	101079	01/24/25 08:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101107	01/24/25 09:42	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	10 mL	101089	01/24/25 08:37	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101114	01/24/25 11:36	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: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

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	06-30-25

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: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

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: Warren Unit Battery #1

Job ID: 890-7595-1
SDG: 07A1988155

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7595-1	FS01	Solid	01/23/25 11:45	01/23/25 13:36	4

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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
Little Rock, AR (501) 224-5060

Work 890-7595 Chain of Custody

Page 1 of 1

Project Manager:	Devin Hencmann	Bill to: (if different)	Ensolum
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy.	Address:	
City, State ZIP:	Carlsbad NM 88220	City, State ZIP:	
Phone:	805 798 2608	Email:	DHencmann@ensolum.com

Work Order Comments

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

Project Name:	Warren Unit Battery #1	Turn Around	
Project Number:	07A1988155	☐ Routine ☒ Rush	
Project Location:		Due Date:	24 Hr.
Sampler's Name:	Connor Whitten	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:		TNM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:		-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:		-1.4
Total Containers:		Corrected Temperature:		-1.2

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Chlorides	BTEX	TPH	Sample Comments
FS01	S	1-23-24	1145	4'	C	1		/	/	/	
											ID: nAPP2500352359

CW

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mo Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		13:36	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7595-1
SDG Number: 07A1988155

Login Number: 7595
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7595-1
SDG Number: 07A1988155

Login Number: 7595
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 01/24/25 08:12 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Devin Hencmann
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 2/3/2025 12:29:51 PM

JOB DESCRIPTION

Warren unit Battery #1
07A1988155

JOB NUMBER

890-7607-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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Job Notes

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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

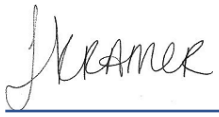

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Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-7607-1
Project/Site: Warren unit Battery #1 SDG: 07A1988155

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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 Job ID: 890-7607-1
Project: Warren unit Battery #1

Job ID: 890-7607-1 Eurofins Carlsbad

Job Narrative
890-7607-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/29/2025 3:05 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 -0.3°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS02 (890-7607-1), SW01 (890-7607-2), SW02 (890-7607-3), FS03 (890-7607-4), FS04 (890-7607-5), FS05 (890-7607-6), FS06 (890-7607-7), FS07 (890-7607-8), SW03 (890-7607-9), SW04 (890-7607-10), SW05 (890-7607-11), SW06 (890-7607-12), FS08 (890-7607-13), FS09 (890-7607-14), FS10 (890-7607-15), FS11 (890-7607-16), FS12 (890-7607-17), SW07 (890-7607-18), SW08 (890-7607-19), SW09 (890-7607-20), FS13 (890-7607-21), SW10 (890-7607-22) and SW11 (890-7607-23).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-101564 and analytical batch 880-101551 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Diesel Range Organics
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-101559 and analytical batch 880-101724 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-101560 and analytical batch 880-101726 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS13 (890-7607-21), SW10 (890-7607-22), SW11 (890-7607-23), (890-7607-A-21-B MS) and (890-7607-A-21-C MSD). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS02

Lab Sample ID: 890-7607-1
Matrix: Solid
Date Collected: 01/28/25 11:10
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1 F2	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:31	1
Toluene	<0.00200	U F1 F2	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:31	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:31	1
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.00401		mg/Kg		01/30/25 09:19	01/30/25 13:31	1
o-Xylene	<0.00200	U F1 F2	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:31	1
Xylenes, Total	<0.00401	U F1 F2	0.00401		mg/Kg		01/30/25 09:19	01/30/25 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*01/30/25 09:19*	*01/30/25 13:31*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*01/30/25 09:19*	*01/30/25 13:31*	*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			01/30/25 13:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/31/25 18:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/30/25 08:57	01/31/25 18:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/30/25 08:57	01/31/25 18:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/30/25 08:57	01/31/25 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*01/30/25 08:57*	*01/31/25 18:22*	*1*
o-Terphenyl	*84*		*70 - 130*	*01/30/25 08:57*	*01/31/25 18:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**838**		9.94		mg/Kg			02/01/25 21:03	1

Client Sample ID: SW01

Lab Sample ID: 890-7607-2
Matrix: Solid
Date Collected: 01/28/25 11:15
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:52	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/30/25 09:19	01/30/25 13:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:52	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/30/25 09:19	01/30/25 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*01/30/25 09:19*	*01/30/25 13:52*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW01

Lab Sample ID: 890-7607-2
Matrix: Solid
Date Collected: 01/28/25 11:15
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*01/30/25 09:19*	*01/30/25 13:52*	*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			01/30/25 13:52	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			01/31/25 19:11	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		01/30/25 08:57	01/31/25 19:11	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		01/30/25 08:57	01/31/25 19:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/30/25 08:57	01/31/25 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*85*		*70 - 130*	*01/30/25 08:57*	*01/31/25 19:11*	*1*
o-Terphenyl	*78*		*70 - 130*	*01/30/25 08:57*	*01/31/25 19:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.92	U	9.92	mg/Kg			02/01/25 21:21	1

Client Sample ID: SW02

Lab Sample ID: 890-7607-3
Matrix: Solid
Date Collected: 01/28/25 11:20
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/30/25 09:19	01/30/25 14:12	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/30/25 09:19	01/30/25 14:12	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/30/25 09:19	01/30/25 14:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/30/25 09:19	01/30/25 14:12	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/30/25 09:19	01/30/25 14:12	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/30/25 09:19	01/30/25 14:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*01/30/25 09:19*	*01/30/25 14:12*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*01/30/25 09:19*	*01/30/25 14:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/30/25 14:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			01/31/25 19:27	1

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW02

Lab Sample ID: 890-7607-3
Matrix: Solid
Date Collected: 01/28/25 11:20
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 19:27	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 19:27	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*01/30/25 08:57*	*01/31/25 19:27*	*1*
o-Terphenyl	*90*		*70 - 130*	*01/30/25 08:57*	*01/31/25 19:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2090**		50.3		mg/Kg			02/01/25 21:27	5

Client Sample ID: FS03

Lab Sample ID: 890-7607-4
Matrix: Solid
Date Collected: 01/28/25 11:25
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/30/25 09:19	01/30/25 14:33	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/30/25 09:19	01/30/25 14:33	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/30/25 09:19	01/30/25 14:33	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		01/30/25 09:19	01/30/25 14:33	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/30/25 09:19	01/30/25 14:33	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/30/25 09:19	01/30/25 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*01/30/25 09:19*	*01/30/25 14:33*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*01/30/25 09:19*	*01/30/25 14:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			01/30/25 14:33	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			01/31/25 19:43	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		01/30/25 08:57	01/31/25 19:43	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 19:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*01/30/25 08:57*	*01/31/25 19:43*	*1*
o-Terphenyl	*78*		*70 - 130*	*01/30/25 08:57*	*01/31/25 19:43*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS03

Lab Sample ID: 890-7607-4
Matrix: Solid
Date Collected: 01/28/25 11:25
Date Received: 01/29/25 15:05
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	287		10.1		mg/Kg			02/01/25 21:45	1

Client Sample ID: FS04

Lab Sample ID: 890-7607-5
Matrix: Solid
Date Collected: 01/28/25 11:30
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 14:53	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 14:53	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 14:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/30/25 09:19	01/30/25 14:53	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 14:53	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/30/25 09:19	01/30/25 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*01/30/25 09:19*	*01/30/25 14:53*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*01/30/25 09:19*	*01/30/25 14:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/30/25 14:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			01/31/25 19:58	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		01/30/25 08:57	01/31/25 19:58	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 19:58	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*01/30/25 08:57*	*01/31/25 19:58*	*1*
o-Terphenyl	*81*		*70 - 130*	*01/30/25 08:57*	*01/31/25 19:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1040		9.96		mg/Kg			02/01/25 21:51	1

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS05

Lab Sample ID: 890-7607-6
Matrix: Solid
Date Collected: 01/28/25 11:35
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 15:13	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 15:13	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 15:13	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/30/25 09:19	01/30/25 15:13	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 15:13	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/30/25 09:19	01/30/25 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*01/30/25 09:19*	*01/30/25 15:13*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/30/25 09:19*	*01/30/25 15:13*	*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			01/30/25 15:13	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			01/31/25 20:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 20:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 20:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*01/30/25 08:57*	*01/31/25 20:15*	*1*
o-Terphenyl	*76*		*70 - 130*	*01/30/25 08:57*	*01/31/25 20:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**673**		9.92		mg/Kg			02/01/25 21:57	1

Client Sample ID: FS06

Lab Sample ID: 890-7607-7
Matrix: Solid
Date Collected: 01/28/25 11:45
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 15:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 15:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 15:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/30/25 09:19	01/30/25 15:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 15:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/30/25 09:19	01/30/25 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*01/30/25 09:19*	*01/30/25 15:34*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS06

Lab Sample ID: 890-7607-7
Matrix: Solid
Date Collected: 01/28/25 11:45
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/30/25 09:19*	*01/30/25 15:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			01/30/25 15:34	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			01/31/25 20:31	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	<49.8	U	49.8	mg/Kg		01/30/25 08:57	01/31/25 20:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		01/30/25 08:57	01/31/25 20:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/30/25 08:57	01/31/25 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*79*		*70 - 130*	*01/30/25 08:57*	*01/31/25 20:31*	*1*
o-Terphenyl	*76*		*70 - 130*	*01/30/25 08:57*	*01/31/25 20:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**323**		10.1	mg/Kg			02/01/25 22:03	1

Client Sample ID: FS07

Lab Sample ID: 890-7607-8
Matrix: Solid
Date Collected: 01/28/25 11:50
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 15:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 15:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 15:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/30/25 09:19	01/30/25 15:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 15:54	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/30/25 09:19	01/30/25 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*01/30/25 09:19*	*01/30/25 15:54*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*01/30/25 09:19*	*01/30/25 15:54*	*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			01/30/25 15:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			01/31/25 20:47	1

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Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS07

Lab Sample ID: 890-7607-8
Matrix: Solid
Date Collected: 01/28/25 11:50
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 20:47	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 20:47	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*01/30/25 08:57*	*01/31/25 20:47*	*1*
o-Terphenyl	*77*		*70 - 130*	*01/30/25 08:57*	*01/31/25 20:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**593**		9.98		mg/Kg			02/01/25 22:09	1

Client Sample ID: SW03

Lab Sample ID: 890-7607-9
Matrix: Solid
Date Collected: 01/28/25 11:55
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/30/25 09:19	01/30/25 16:15	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/30/25 09:19	01/30/25 16:15	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/30/25 09:19	01/30/25 16:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/30/25 09:19	01/30/25 16:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/30/25 09:19	01/30/25 16:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/30/25 09:19	01/30/25 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*01/30/25 09:19*	*01/30/25 16:15*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/30/25 09:19*	*01/30/25 16:15*	*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			01/30/25 16:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**59.0**		49.8		mg/Kg			01/31/25 21:02	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		01/30/25 08:57	01/31/25 21:02	1
Diesel Range Organics (Over C10-C28)	**59.0**		49.8		mg/Kg		01/30/25 08:57	01/31/25 21:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*01/30/25 08:57*	*01/31/25 21:02*	*1*
o-Terphenyl	*84*		*70 - 130*	*01/30/25 08:57*	*01/31/25 21:02*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW03

Lab Sample ID: 890-7607-9
Matrix: Solid
Date Collected: 01/28/25 11:55
Date Received: 01/29/25 15:05
Sample Depth: 0-4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1030**		10.0		mg/Kg			02/01/25 22:15	1

Client Sample ID: SW04

Lab Sample ID: 890-7607-10
Matrix: Solid
Date Collected: 01/28/25 12:00
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 16:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 16:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 16:35	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/30/25 09:19	01/30/25 16:35	1
o-Xylene	**0.00574**		0.00200		mg/Kg		01/30/25 09:19	01/30/25 16:35	1
Xylenes, Total	**0.00574**		0.00401		mg/Kg		01/30/25 09:19	01/30/25 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*01/30/25 09:19*	*01/30/25 16:35*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/30/25 09:19*	*01/30/25 16:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00574**		0.00401		mg/Kg			01/30/25 16:35	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**112**		49.9		mg/Kg			01/31/25 21:18	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		01/30/25 08:57	01/31/25 21:18	1
Diesel Range Organics (Over C10-C28)	**112**		49.9		mg/Kg		01/30/25 08:57	01/31/25 21:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/30/25 08:57	01/31/25 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*01/30/25 08:57*	*01/31/25 21:18*	*1*
o-Terphenyl	*81*		*70 - 130*	*01/30/25 08:57*	*01/31/25 21:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**565**		10.1		mg/Kg			02/01/25 22:21	1

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW05

Lab Sample ID: 890-7607-11
Matrix: Solid
Date Collected: 01/28/25 12:05
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 18:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 18:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 18:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/30/25 09:19	01/30/25 18:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 18:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/30/25 09:19	01/30/25 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*01/30/25 09:19*	*01/30/25 18:25*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*01/30/25 09:19*	*01/30/25 18:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/30/25 18:25	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			01/31/25 21:50	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		01/30/25 08:57	01/31/25 21:50	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 21:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*01/30/25 08:57*	*01/31/25 21:50*	*1*
o-Terphenyl	*79*		*70 - 130*	*01/30/25 08:57*	*01/31/25 21:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1210**		10.0		mg/Kg			01/31/25 06:37	1

Client Sample ID: SW06

Lab Sample ID: 890-7607-12
Matrix: Solid
Date Collected: 01/28/25 12:10
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 18:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 18:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 18:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/30/25 09:19	01/30/25 18:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 18:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/30/25 09:19	01/30/25 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*01/30/25 09:19*	*01/30/25 18:45*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW06

Lab Sample ID: 890-7607-12
Matrix: Solid
Date Collected: 01/28/25 12:10
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*01/30/25 09:19*	*01/30/25 18:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			01/30/25 18:45	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			01/31/25 22:06	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		01/30/25 08:57	01/31/25 22:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/30/25 08:57	01/31/25 22:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/30/25 08:57	01/31/25 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*82*		*70 - 130*	*01/30/25 08:57*	*01/31/25 22:06*	*1*
o-Terphenyl	*74*		*70 - 130*	*01/30/25 08:57*	*01/31/25 22:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**84.7**		10.1	mg/Kg			01/31/25 06:55	1

Client Sample ID: FS08

Lab Sample ID: 890-7607-13
Matrix: Solid
Date Collected: 01/28/25 12:15
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 19:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 19:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 19:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/30/25 09:19	01/30/25 19:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 19:06	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/30/25 09:19	01/30/25 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*01/30/25 09:19*	*01/30/25 19:06*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/30/25 09:19*	*01/30/25 19:06*	*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			01/30/25 19:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			01/31/25 22:21	1

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Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS08

Lab Sample ID: 890-7607-13
Matrix: Solid
Date Collected: 01/28/25 12:15
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 22:21	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 22:21	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/30/25 08:57	01/31/25 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*01/30/25 08:57*	*01/31/25 22:21*	*1*
o-Terphenyl	*85*		*70 - 130*	*01/30/25 08:57*	*01/31/25 22:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U	9.96		mg/Kg			01/31/25 07:01	1

Client Sample ID: FS09

Lab Sample ID: 890-7607-14
Matrix: Solid
Date Collected: 01/28/25 12:20
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 19:26	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 19:26	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 19:26	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/30/25 09:19	01/30/25 19:26	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 19:26	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/30/25 09:19	01/30/25 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*01/30/25 09:19*	*01/30/25 19:26*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*01/30/25 09:19*	*01/30/25 19:26*	*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			01/30/25 19:26	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			01/31/25 22:38	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		01/30/25 08:57	01/31/25 22:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/30/25 08:57	01/31/25 22:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/30/25 08:57	01/31/25 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*01/30/25 08:57*	*01/31/25 22:38*	*1*
o-Terphenyl	*79*		*70 - 130*	*01/30/25 08:57*	*01/31/25 22:38*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS09

Lab Sample ID: 890-7607-14
Matrix: Solid
Date Collected: 01/28/25 12:20
Date Received: 01/29/25 15:05
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.90	U	9.90		mg/Kg			01/31/25 07:07	1

Client Sample ID: FS10

Lab Sample ID: 890-7607-15
Matrix: Solid
Date Collected: 01/28/25 12:25
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 19:47	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 19:47	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 19:47	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		01/30/25 09:19	01/30/25 19:47	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/30/25 09:19	01/30/25 19:47	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		01/30/25 09:19	01/30/25 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*01/30/25 09:19*	*01/30/25 19:47*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*01/30/25 09:19*	*01/30/25 19:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			01/30/25 19:47	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			01/31/25 22:53	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		01/30/25 08:57	01/31/25 22:53	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 22:53	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*01/30/25 08:57*	*01/31/25 22:53*	*1*
o-Terphenyl	*74*		*70 - 130*	*01/30/25 08:57*	*01/31/25 22:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**541**		9.92		mg/Kg			01/31/25 07:13	1

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS11

Lab Sample ID: 890-7607-16
Matrix: Solid
Date Collected: 01/28/25 12:30
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 20:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 20:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 20:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/30/25 09:19	01/30/25 20:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 20:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/30/25 09:19	01/30/25 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*01/30/25 09:19*	*01/30/25 20:07*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*01/30/25 09:19*	*01/30/25 20:07*	*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			01/30/25 20:07	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			01/31/25 23:10	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		01/30/25 08:57	01/31/25 23:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 23:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*01/30/25 08:57*	*01/31/25 23:10*	*1*
o-Terphenyl	*81*		*70 - 130*	*01/30/25 08:57*	*01/31/25 23:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.90	U	9.90		mg/Kg			01/31/25 07:48	1

Client Sample ID: FS12

Lab Sample ID: 890-7607-17
Matrix: Solid
Date Collected: 01/28/25 12:35
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 20:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 20:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 20:28	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/30/25 09:19	01/30/25 20:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 20:28	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/30/25 09:19	01/30/25 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*01/30/25 09:19*	*01/30/25 20:28*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS12

Lab Sample ID: 890-7607-17
Matrix: Solid
Date Collected: 01/28/25 12:35
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*01/30/25 09:19*	*01/30/25 20:28*	*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			01/30/25 20:28	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			01/31/25 23:25	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		01/30/25 08:57	01/31/25 23:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/30/25 08:57	01/31/25 23:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/30/25 08:57	01/31/25 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*01/30/25 08:57*	*01/31/25 23:25*	*1*
o-Terphenyl	*82*		*70 - 130*	*01/30/25 08:57*	*01/31/25 23:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1	mg/Kg			01/31/25 07:54	1

Client Sample ID: SW07

Lab Sample ID: 890-7607-18
Matrix: Solid
Date Collected: 01/28/25 12:40
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 20:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 20:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/30/25 09:19	01/30/25 20:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/30/25 09:19	01/30/25 20:48	1
o-Xylene	**0.00342**		0.00200	mg/Kg		01/30/25 09:19	01/30/25 20:48	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/30/25 09:19	01/30/25 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*01/30/25 09:19*	*01/30/25 20:48*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/30/25 09:19*	*01/30/25 20:48*	*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			01/30/25 20:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**191**		49.9	mg/Kg			01/31/25 23:41	1

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Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW07

Lab Sample ID: 890-7607-18
Matrix: Solid
Date Collected: 01/28/25 12:40
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/30/25 08:57	01/31/25 23:41	1
Diesel Range Organics (Over C10-C28)	**191**		49.9		mg/Kg		01/30/25 08:57	01/31/25 23:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/30/25 08:57	01/31/25 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*01/30/25 08:57*	*01/31/25 23:41*	*1*
o-Terphenyl	*80*		*70 - 130*	*01/30/25 08:57*	*01/31/25 23:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94		mg/Kg			01/31/25 08:00	1

Client Sample ID: SW08

Lab Sample ID: 890-7607-19
Matrix: Solid
Date Collected: 01/28/25 12:43
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 21:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 21:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 21:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/30/25 09:19	01/30/25 21:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/30/25 09:19	01/30/25 21:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/30/25 09:19	01/30/25 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*01/30/25 09:19*	*01/30/25 21:09*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*01/30/25 09:19*	*01/30/25 21:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/30/25 21:09	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			01/31/25 23:57	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		01/30/25 08:57	01/31/25 23:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 23:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 08:57	01/31/25 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*01/30/25 08:57*	*01/31/25 23:57*	*1*
o-Terphenyl	*83*		*70 - 130*	*01/30/25 08:57*	*01/31/25 23:57*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW08

Lab Sample ID: 890-7607-19
Matrix: Solid
Date Collected: 01/28/25 12:43
Date Received: 01/29/25 15:05
Sample Depth: 0-4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.98	U	9.98		mg/Kg			01/31/25 08:06	1

Client Sample ID: SW09

Lab Sample ID: 890-7607-20
Matrix: Solid
Date Collected: 01/28/25 12:50
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 21:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 21:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 21:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/30/25 09:19	01/30/25 21:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 21:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/30/25 09:19	01/30/25 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*01/30/25 09:19*	*01/30/25 21:29*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*01/30/25 09:19*	*01/30/25 21:29*	*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			01/30/25 21:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			02/01/25 00:13	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	<49.7	U	49.7		mg/Kg		01/30/25 08:57	02/01/25 00:13	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/30/25 08:57	02/01/25 00:13	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/30/25 08:57	02/01/25 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*01/30/25 08:57*	*02/01/25 00:13*	*1*
o-Terphenyl	*74*		*70 - 130*	*01/30/25 08:57*	*02/01/25 00:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**43.6**		9.96		mg/Kg			01/31/25 08:12	1

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS13

Lab Sample ID: 890-7607-21
Matrix: Solid
Date Collected: 01/29/25 10:30
Date Received: 01/29/25 15:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:51	01/30/25 18:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:51	01/30/25 18:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:51	01/30/25 18:57	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/30/25 08:51	01/30/25 18:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:51	01/30/25 18:57	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/30/25 08:51	01/30/25 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*01/30/25 08:51*	*01/30/25 18:57*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*01/30/25 08:51*	*01/30/25 18:57*	*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			01/30/25 18:57	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			01/31/25 18:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 18:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 18:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*146*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 18:22*	*1*
o-Terphenyl	*117*		*70 - 130*	*01/30/25 09:00*	*01/31/25 18:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/31/25 08:18	1

Client Sample ID: SW10

Lab Sample ID: 890-7607-22
Matrix: Solid
Date Collected: 01/29/25 10:35
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/30/25 08:51	01/30/25 19:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/30/25 08:51	01/30/25 19:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/30/25 08:51	01/30/25 19:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/30/25 08:51	01/30/25 19:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/30/25 08:51	01/30/25 19:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/30/25 08:51	01/30/25 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*01/30/25 08:51*	*01/30/25 19:18*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW10

Lab Sample ID: 890-7607-22
Matrix: Solid
Date Collected: 01/29/25 10:35
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/30/25 08:51*	*01/30/25 19:18*	*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			01/30/25 19:18	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			01/31/25 19:11	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		01/30/25 09:00	01/31/25 19:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/30/25 09:00	01/31/25 19:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/30/25 09:00	01/31/25 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*152*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 19:11*	*1*
o-Terphenyl	*124*		*70 - 130*	*01/30/25 09:00*	*01/31/25 19:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.92	U	9.92	mg/Kg			01/31/25 08:35	1

Client Sample ID: SW11

Lab Sample ID: 890-7607-23
Matrix: Solid
Date Collected: 01/29/25 10:40
Date Received: 01/29/25 15:05
Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/30/25 08:51	01/30/25 19:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/30/25 08:51	01/30/25 19:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/30/25 08:51	01/30/25 19:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/30/25 08:51	01/30/25 19:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/30/25 08:51	01/30/25 19:38	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/30/25 08:51	01/30/25 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*01/30/25 08:51*	*01/30/25 19:38*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*01/30/25 08:51*	*01/30/25 19:38*	*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			01/30/25 19:38	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			01/31/25 19:27	1

Client Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW11

Date Collected: 01/29/25 10:40
Date Received: 01/29/25 15:05
Sample Depth: 0-4

Lab Sample ID: 890-7607-23

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 19:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 19:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 19:27*	*1*
o-Terphenyl	*109*		*70 - 130*	*01/30/25 09:00*	*01/31/25 19:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/31/25 08:41	1

Surrogate Summary

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7607-1	FS02	81	87
890-7607-1 MS	FS02	106	95
890-7607-1 MSD	FS02	106	101
890-7607-2	SW01	116	98
890-7607-3	SW02	119	106
890-7607-4	FS03	117	94
890-7607-5	FS04	124	104
890-7607-6	FS05	121	101
890-7607-7	FS06	123	101
890-7607-8	FS07	122	107
890-7607-9	SW03	108	100
890-7607-10	SW04	108	89
890-7607-11	SW05	81	93
890-7607-12	SW06	123	96
890-7607-13	FS08	114	102
890-7607-14	FS09	101	91
890-7607-15	FS10	107	90
890-7607-16	FS11	124	120
890-7607-17	FS12	120	95
890-7607-18	SW07	73	89
890-7607-19	SW08	126	88
890-7607-20	SW09	112	87
890-7607-21	FS13	105	85
890-7607-22	SW10	86	89
890-7607-23	SW11	102	75
890-7609-A-13-C MS	Matrix Spike	90	92
890-7609-A-13-D MSD	Matrix Spike Duplicate	102	104
LCS 880-101557/1-A	Lab Control Sample	93	93
LCS 880-101564/1-A	Lab Control Sample	105	90
LCSD 880-101557/2-A	Lab Control Sample Dup	98	103
LCSD 880-101564/2-A	Lab Control Sample Dup	107	98
MB 880-101557/5-A	Method Blank	94	91
MB 880-101564/5-A	Method Blank	158 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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7607-1	FS02	89	84
890-7607-1 MS	FS02	91	92
890-7607-1 MSD	FS02	92	92
890-7607-2	SW01	85	78
890-7607-3	SW02	95	90
890-7607-4	FS03	83	78

Surrogate Summary

Client: Ensolum Job ID: 890-7607-1
Project/Site: Warren unit Battery #1 SDG: 07A1988155

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-7607-5	FS04	86	81										
890-7607-6	FS05	79	76										
890-7607-7	FS06	79	76										
890-7607-8	FS07	80	77										
890-7607-9	SW03	86	84										
890-7607-10	SW04	81	81										
890-7607-11	SW05	83	79										
890-7607-12	SW06	82	74										
890-7607-13	FS08	90	85										
890-7607-14	FS09	85	79										
890-7607-15	FS10	80	74										
890-7607-16	FS11	86	81										
890-7607-17	FS12	85	82										
890-7607-18	SW07	81	80										
890-7607-19	SW08	91	83										
890-7607-20	SW09	79	74										
890-7607-21	FS13	146 S1+	117										
890-7607-21 MS	FS13	138 S1+	126										
890-7607-21 MSD	FS13	137 S1+	127										
890-7607-22	SW10	152 S1+	124										
890-7607-23	SW11	137 S1+	109										
LCS 880-101559/2-A	Lab Control Sample	104	110										
LCS 880-101560/2-A	Lab Control Sample	125	117										
LCSD 880-101559/3-A	Lab Control Sample Dup	100	106										
LCSD 880-101560/3-A	Lab Control Sample Dup	130	119										
MB 880-101559/1-A	Method Blank	96	90										
MB 880-101560/1-A	Method Blank	144 S1+	125										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-101557/5-A
Matrix: Solid
Analysis Batch: 101550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 101557

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:51	01/30/25 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:51	01/30/25 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:51	01/30/25 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/30/25 08:51	01/30/25 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:51	01/30/25 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/30/25 08:51	01/30/25 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*01/30/25 08:51*	*01/30/25 11:43*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*01/30/25 08:51*	*01/30/25 11:43*	*1*

Lab Sample ID: LCS 880-101557/1-A
Matrix: Solid
Analysis Batch: 101550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101557

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09098		mg/Kg		91	70 - 130		
Toluene			0.100	0.09625		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09378		mg/Kg		94	70 - 130		
m-Xylene & p-Xylene			0.200	0.1811		mg/Kg		91	70 - 130		
o-Xylene			0.100	0.08837		mg/Kg		88	70 - 130		

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

Lab Sample ID: LCSD 880-101557/2-A
Matrix: Solid
Analysis Batch: 101550

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101557

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09870		mg/Kg		99	70 - 130	8	35
Toluene			0.100	0.1018		mg/Kg		102	70 - 130	6	35
Ethylbenzene			0.100	0.09952		mg/Kg		100	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1941		mg/Kg		97	70 - 130	7	35
o-Xylene			0.100	0.09392		mg/Kg		94	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-7609-A-13-C MS
Matrix: Solid
Analysis Batch: 101550

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 101557

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.06955		mg/Kg		70	70 - 130		
Toluene	<0.00200	U	0.100	0.07527		mg/Kg		75	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

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

Lab Sample ID: 890-7609-A-13-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 101550 — **Prep Batch: 101557**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U F1	0.100	0.06245	F1	mg/Kg		62	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.1187	F1	mg/Kg		59	70 - 130
o-Xylene	<0.00200	U F1	0.100	0.06052	F1	mg/Kg		61	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 890-7609-A-13-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 101550 — **Prep Batch: 101557**

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	0.09607		mg/Kg		96	70 - 130	32	35
Toluene	<0.00200	U	0.100	0.08976		mg/Kg		90	70 - 130	18	35
Ethylbenzene	<0.00200	U F1	0.100	0.07287		mg/Kg		73	70 - 130	15	35
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.1338	F1	mg/Kg		67	70 - 130	12	35
o-Xylene	<0.00200	U F1	0.100	0.07203		mg/Kg		72	70 - 130	17	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 880-101564/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 101551 — **Prep Batch: 101564**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/30/25 09:19	01/30/25 13:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:19	01/30/25 13:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/30/25 09:19	01/30/25 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*158*	*S1+*	*70 - 130*	*01/30/25 09:19*	*01/30/25 13:03*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*01/30/25 09:19*	*01/30/25 13:03*	*1*

Lab Sample ID: LCS 880-101564/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 101551 — **Prep Batch: 101564**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09030		mg/Kg		90	70 - 130
Toluene	0.100	0.08972		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.08662		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1515		mg/Kg		76	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

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

Lab Sample ID: LCS 880-101564/1-A
Matrix: Solid
Analysis Batch: 101551

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101564

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.07833		mg/Kg		78	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 880-101564/2-A
Matrix: Solid
Analysis Batch: 101551

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101564

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09197		mg/Kg		92	70 - 130	2	35
Toluene			0.100	0.09426		mg/Kg		94	70 - 130	5	35
Ethylbenzene			0.100	0.09446		mg/Kg		94	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1915		mg/Kg		96	70 - 130	23	35
o-Xylene			0.100	0.09089		mg/Kg		91	70 - 130	15	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-7607-1 MS
Matrix: Solid
Analysis Batch: 101551

Client Sample ID: FS02
Prep Type: Total/NA
Prep Batch: 101564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U F1 F2	0.100	0.06018	F1	mg/Kg		60	70 - 130		
Toluene	<0.00200	U F1 F2	0.100	0.06068	F1	mg/Kg		61	70 - 130		
Ethylbenzene	<0.00200	U F1	0.100	0.05917	F1	mg/Kg		59	70 - 130		
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.200	0.1193	F1	mg/Kg		60	70 - 130		
o-Xylene	<0.00200	U F1 F2	0.100	0.06346	F1	mg/Kg		63	70 - 130		

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

Lab Sample ID: 890-7607-1 MSD
Matrix: Solid
Analysis Batch: 101551

Client Sample ID: FS02
Prep Type: Total/NA
Prep Batch: 101564

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.100	0.08940	F2	mg/Kg		89	70 - 130	39	35
Toluene	<0.00200	U F1 F2	0.100	0.08724	F2	mg/Kg		87	70 - 130	36	35
Ethylbenzene	<0.00200	U F1	0.100	0.08171		mg/Kg		82	70 - 130	32	35
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.200	0.1772	F2	mg/Kg		89	70 - 130	39	35
o-Xylene	<0.00200	U F1 F2	0.100	0.09101	F2	mg/Kg		91	70 - 130	36	35

QC Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

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

Lab Sample ID: 890-7607-1 MSD
Matrix: Solid
Analysis Batch: 101551

Client Sample ID: FS02
Prep Type: Total/NA
Prep Batch: 101564

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-101559/1-A
Matrix: Solid
Analysis Batch: 101724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 101559

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		01/30/25 08:57	01/31/25 17:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/30/25 08:57	01/31/25 17:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/30/25 08:57	01/31/25 17:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	01/30/25 08:57	01/31/25 17:35	1
o-Terphenyl	90		70 - 130	01/30/25 08:57	01/31/25 17:35	1

Lab Sample ID: LCS 880-101559/2-A
Matrix: Solid
Analysis Batch: 101724

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101559

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	926.7		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	980.4		mg/Kg		98	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-101559/3-A
Matrix: Solid
Analysis Batch: 101724

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101559

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	899.5		mg/Kg		90	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	936.7		mg/Kg		94	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	106		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

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

Lab Sample ID: 890-7607-1 MS
Matrix: Solid
Analysis Batch: 101724

Client Sample ID: FS02
Prep Type: Total/NA
Prep Batch: 101559

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	695.2		mg/Kg		70	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	728.1		mg/Kg		73	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Lab Sample ID: 890-7607-1 MSD
Matrix: Solid
Analysis Batch: 101724

Client Sample ID: FS02
Prep Type: Total/NA
Prep Batch: 101559

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	997	694.0		mg/Kg		70	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	726.4		mg/Kg		73	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Lab Sample ID: MB 880-101560/1-A
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 101560

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		01/30/25 09:00	01/31/25 17:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 17:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 17:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*144*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 17:35*	*1*
o-Terphenyl	*125*		*70 - 130*	*01/30/25 09:00*	*01/31/25 17:35*	*1*

Lab Sample ID: LCS 880-101560/2-A
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101560

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1055		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1089		mg/Kg		109	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

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

Lab Sample ID: LCS 880-101560/2-A
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101560

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	125		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: LCSD 880-101560/3-A
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101560

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1060		mg/Kg		106	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1109		mg/Kg		111	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	130		70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: 890-7607-21 MS
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: FS13
Prep Type: Total/NA
Prep Batch: 101560

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	995	1049		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	995	1109		mg/Kg		111	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	126		70 - 130

Lab Sample ID: 890-7607-21 MSD
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: FS13
Prep Type: Total/NA
Prep Batch: 101560

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	995	1082		mg/Kg		109	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	995	1118		mg/Kg		112	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	137	S1+	70 - 130
o-Terphenyl	127		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-101614/1-A
Matrix: Solid
Analysis Batch: 101668

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/31/25 06:20	1

Lab Sample ID: LCS 880-101614/2-A
Matrix: Solid
Analysis Batch: 101668

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	273.1		mg/Kg		109	90 - 110		

Lab Sample ID: LCSD 880-101614/3-A
Matrix: Solid
Analysis Batch: 101668

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	273.5		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 890-7607-11 MS
Matrix: Solid
Analysis Batch: 101668

Client Sample ID: SW05
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1210		251	1441	4	mg/Kg		94	90 - 110		

Lab Sample ID: 890-7607-11 MSD
Matrix: Solid
Analysis Batch: 101668

Client Sample ID: SW05
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1210		251	1445	4	mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-7607-21 MS
Matrix: Solid
Analysis Batch: 101668

Client Sample ID: FS13
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	<10.0	U	250	282.7		mg/Kg		109	90 - 110		

Lab Sample ID: 890-7607-21 MSD
Matrix: Solid
Analysis Batch: 101668

Client Sample ID: FS13
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<10.0	U	250	283.6		mg/Kg		110	90 - 110	0	20

Lab Sample ID: MB 880-101613/1-A
Matrix: Solid
Analysis Batch: 101669

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			02/01/25 19:23	1

QC Sample Results

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-101613/2-A
Matrix: Solid
Analysis Batch: 101669

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	274.0		mg/Kg		110	90 - 110		

Lab Sample ID: LCSD 880-101613/3-A
Matrix: Solid
Analysis Batch: 101669

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	274.0		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 890-7607-1 MS
Matrix: Solid
Analysis Batch: 101669

Client Sample ID: FS02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	838		249	1075		mg/Kg		95	90 - 110		

Lab Sample ID: 890-7607-1 MSD
Matrix: Solid
Analysis Batch: 101669

Client Sample ID: FS02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	838		249	1065		mg/Kg		91	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

GC VOA

Analysis Batch: 101550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-21	FS13	Total/NA	Solid	8021B	101557
890-7607-22	SW10	Total/NA	Solid	8021B	101557
890-7607-23	SW11	Total/NA	Solid	8021B	101557
MB 880-101557/5-A	Method Blank	Total/NA	Solid	8021B	101557
LCS 880-101557/1-A	Lab Control Sample	Total/NA	Solid	8021B	101557
LCSD 880-101557/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	101557
890-7609-A-13-C MS	Matrix Spike	Total/NA	Solid	8021B	101557
890-7609-A-13-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	101557

Analysis Batch: 101551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-1	FS02	Total/NA	Solid	8021B	101564
890-7607-2	SW01	Total/NA	Solid	8021B	101564
890-7607-3	SW02	Total/NA	Solid	8021B	101564
890-7607-4	FS03	Total/NA	Solid	8021B	101564
890-7607-5	FS04	Total/NA	Solid	8021B	101564
890-7607-6	FS05	Total/NA	Solid	8021B	101564
890-7607-7	FS06	Total/NA	Solid	8021B	101564
890-7607-8	FS07	Total/NA	Solid	8021B	101564
890-7607-9	SW03	Total/NA	Solid	8021B	101564
890-7607-10	SW04	Total/NA	Solid	8021B	101564
890-7607-11	SW05	Total/NA	Solid	8021B	101564
890-7607-12	SW06	Total/NA	Solid	8021B	101564
890-7607-13	FS08	Total/NA	Solid	8021B	101564
890-7607-14	FS09	Total/NA	Solid	8021B	101564
890-7607-15	FS10	Total/NA	Solid	8021B	101564
890-7607-16	FS11	Total/NA	Solid	8021B	101564
890-7607-17	FS12	Total/NA	Solid	8021B	101564
890-7607-18	SW07	Total/NA	Solid	8021B	101564
890-7607-19	SW08	Total/NA	Solid	8021B	101564
890-7607-20	SW09	Total/NA	Solid	8021B	101564
MB 880-101564/5-A	Method Blank	Total/NA	Solid	8021B	101564
LCS 880-101564/1-A	Lab Control Sample	Total/NA	Solid	8021B	101564
LCSD 880-101564/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	101564
890-7607-1 MS	FS02	Total/NA	Solid	8021B	101564
890-7607-1 MSD	FS02	Total/NA	Solid	8021B	101564

Prep Batch: 101557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-21	FS13	Total/NA	Solid	5035	
890-7607-22	SW10	Total/NA	Solid	5035	
890-7607-23	SW11	Total/NA	Solid	5035	
MB 880-101557/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-101557/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-101557/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7609-A-13-C MS	Matrix Spike	Total/NA	Solid	5035	
890-7609-A-13-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 101564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-1	FS02	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

GC VOA (Continued)

Prep Batch: 101564 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-2	SW01	Total/NA	Solid	5035	
890-7607-3	SW02	Total/NA	Solid	5035	
890-7607-4	FS03	Total/NA	Solid	5035	
890-7607-5	FS04	Total/NA	Solid	5035	
890-7607-6	FS05	Total/NA	Solid	5035	
890-7607-7	FS06	Total/NA	Solid	5035	
890-7607-8	FS07	Total/NA	Solid	5035	
890-7607-9	SW03	Total/NA	Solid	5035	
890-7607-10	SW04	Total/NA	Solid	5035	
890-7607-11	SW05	Total/NA	Solid	5035	
890-7607-12	SW06	Total/NA	Solid	5035	
890-7607-13	FS08	Total/NA	Solid	5035	
890-7607-14	FS09	Total/NA	Solid	5035	
890-7607-15	FS10	Total/NA	Solid	5035	
890-7607-16	FS11	Total/NA	Solid	5035	
890-7607-17	FS12	Total/NA	Solid	5035	
890-7607-18	SW07	Total/NA	Solid	5035	
890-7607-19	SW08	Total/NA	Solid	5035	
890-7607-20	SW09	Total/NA	Solid	5035	
MB 880-101564/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-101564/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-101564/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7607-1 MS	FS02	Total/NA	Solid	5035	
890-7607-1 MSD	FS02	Total/NA	Solid	5035	

Analysis Batch: 101740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-1	FS02	Total/NA	Solid	Total BTEX	
890-7607-2	SW01	Total/NA	Solid	Total BTEX	
890-7607-3	SW02	Total/NA	Solid	Total BTEX	
890-7607-4	FS03	Total/NA	Solid	Total BTEX	
890-7607-5	FS04	Total/NA	Solid	Total BTEX	
890-7607-6	FS05	Total/NA	Solid	Total BTEX	
890-7607-7	FS06	Total/NA	Solid	Total BTEX	
890-7607-8	FS07	Total/NA	Solid	Total BTEX	
890-7607-9	SW03	Total/NA	Solid	Total BTEX	
890-7607-10	SW04	Total/NA	Solid	Total BTEX	
890-7607-11	SW05	Total/NA	Solid	Total BTEX	
890-7607-12	SW06	Total/NA	Solid	Total BTEX	
890-7607-13	FS08	Total/NA	Solid	Total BTEX	
890-7607-14	FS09	Total/NA	Solid	Total BTEX	
890-7607-15	FS10	Total/NA	Solid	Total BTEX	
890-7607-16	FS11	Total/NA	Solid	Total BTEX	
890-7607-17	FS12	Total/NA	Solid	Total BTEX	
890-7607-18	SW07	Total/NA	Solid	Total BTEX	
890-7607-19	SW08	Total/NA	Solid	Total BTEX	
890-7607-20	SW09	Total/NA	Solid	Total BTEX	
890-7607-21	FS13	Total/NA	Solid	Total BTEX	
890-7607-22	SW10	Total/NA	Solid	Total BTEX	
890-7607-23	SW11	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

GC Semi VOA

Prep Batch: 101559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-1	FS02	Total/NA	Solid	8015NM Prep	
890-7607-2	SW01	Total/NA	Solid	8015NM Prep	
890-7607-3	SW02	Total/NA	Solid	8015NM Prep	
890-7607-4	FS03	Total/NA	Solid	8015NM Prep	
890-7607-5	FS04	Total/NA	Solid	8015NM Prep	
890-7607-6	FS05	Total/NA	Solid	8015NM Prep	
890-7607-7	FS06	Total/NA	Solid	8015NM Prep	
890-7607-8	FS07	Total/NA	Solid	8015NM Prep	
890-7607-9	SW03	Total/NA	Solid	8015NM Prep	
890-7607-10	SW04	Total/NA	Solid	8015NM Prep	
890-7607-11	SW05	Total/NA	Solid	8015NM Prep	
890-7607-12	SW06	Total/NA	Solid	8015NM Prep	
890-7607-13	FS08	Total/NA	Solid	8015NM Prep	
890-7607-14	FS09	Total/NA	Solid	8015NM Prep	
890-7607-15	FS10	Total/NA	Solid	8015NM Prep	
890-7607-16	FS11	Total/NA	Solid	8015NM Prep	
890-7607-17	FS12	Total/NA	Solid	8015NM Prep	
890-7607-18	SW07	Total/NA	Solid	8015NM Prep	
890-7607-19	SW08	Total/NA	Solid	8015NM Prep	
890-7607-20	SW09	Total/NA	Solid	8015NM Prep	
MB 880-101559/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-101559/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-101559/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7607-1 MS	FS02	Total/NA	Solid	8015NM Prep	
890-7607-1 MSD	FS02	Total/NA	Solid	8015NM Prep	

Prep Batch: 101560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-21	FS13	Total/NA	Solid	8015NM Prep	
890-7607-22	SW10	Total/NA	Solid	8015NM Prep	
890-7607-23	SW11	Total/NA	Solid	8015NM Prep	
MB 880-101560/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-101560/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-101560/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7607-21 MS	FS13	Total/NA	Solid	8015NM Prep	
890-7607-21 MSD	FS13	Total/NA	Solid	8015NM Prep	

Analysis Batch: 101724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-1	FS02	Total/NA	Solid	8015B NM	101559
890-7607-2	SW01	Total/NA	Solid	8015B NM	101559
890-7607-3	SW02	Total/NA	Solid	8015B NM	101559
890-7607-4	FS03	Total/NA	Solid	8015B NM	101559
890-7607-5	FS04	Total/NA	Solid	8015B NM	101559
890-7607-6	FS05	Total/NA	Solid	8015B NM	101559
890-7607-7	FS06	Total/NA	Solid	8015B NM	101559
890-7607-8	FS07	Total/NA	Solid	8015B NM	101559
890-7607-9	SW03	Total/NA	Solid	8015B NM	101559
890-7607-10	SW04	Total/NA	Solid	8015B NM	101559
890-7607-11	SW05	Total/NA	Solid	8015B NM	101559
890-7607-12	SW06	Total/NA	Solid	8015B NM	101559

QC Association Summary

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

GC Semi VOA (Continued)

Analysis Batch: 101724 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-13	FS08	Total/NA	Solid	8015B NM	101559
890-7607-14	FS09	Total/NA	Solid	8015B NM	101559
890-7607-15	FS10	Total/NA	Solid	8015B NM	101559
890-7607-16	FS11	Total/NA	Solid	8015B NM	101559
890-7607-17	FS12	Total/NA	Solid	8015B NM	101559
890-7607-18	SW07	Total/NA	Solid	8015B NM	101559
890-7607-19	SW08	Total/NA	Solid	8015B NM	101559
890-7607-20	SW09	Total/NA	Solid	8015B NM	101559
MB 880-101559/1-A	Method Blank	Total/NA	Solid	8015B NM	101559
LCS 880-101559/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	101559
LCSD 880-101559/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	101559
890-7607-1 MS	FS02	Total/NA	Solid	8015B NM	101559
890-7607-1 MSD	FS02	Total/NA	Solid	8015B NM	101559

Analysis Batch: 101726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-21	FS13	Total/NA	Solid	8015B NM	101560
890-7607-22	SW10	Total/NA	Solid	8015B NM	101560
890-7607-23	SW11	Total/NA	Solid	8015B NM	101560
MB 880-101560/1-A	Method Blank	Total/NA	Solid	8015B NM	101560
LCS 880-101560/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	101560
LCSD 880-101560/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	101560
890-7607-21 MS	FS13	Total/NA	Solid	8015B NM	101560
890-7607-21 MSD	FS13	Total/NA	Solid	8015B NM	101560

Analysis Batch: 101876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-1	FS02	Total/NA	Solid	8015 NM	
890-7607-2	SW01	Total/NA	Solid	8015 NM	
890-7607-3	SW02	Total/NA	Solid	8015 NM	
890-7607-4	FS03	Total/NA	Solid	8015 NM	
890-7607-5	FS04	Total/NA	Solid	8015 NM	
890-7607-6	FS05	Total/NA	Solid	8015 NM	
890-7607-7	FS06	Total/NA	Solid	8015 NM	
890-7607-8	FS07	Total/NA	Solid	8015 NM	
890-7607-9	SW03	Total/NA	Solid	8015 NM	
890-7607-10	SW04	Total/NA	Solid	8015 NM	
890-7607-11	SW05	Total/NA	Solid	8015 NM	
890-7607-12	SW06	Total/NA	Solid	8015 NM	
890-7607-13	FS08	Total/NA	Solid	8015 NM	
890-7607-14	FS09	Total/NA	Solid	8015 NM	
890-7607-15	FS10	Total/NA	Solid	8015 NM	
890-7607-16	FS11	Total/NA	Solid	8015 NM	
890-7607-17	FS12	Total/NA	Solid	8015 NM	
890-7607-18	SW07	Total/NA	Solid	8015 NM	
890-7607-19	SW08	Total/NA	Solid	8015 NM	
890-7607-20	SW09	Total/NA	Solid	8015 NM	
890-7607-21	FS13	Total/NA	Solid	8015 NM	
890-7607-22	SW10	Total/NA	Solid	8015 NM	
890-7607-23	SW11	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

HPLC/IC

Leach Batch: 101613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-1	FS02	Soluble	Solid	DI Leach	
890-7607-2	SW01	Soluble	Solid	DI Leach	
890-7607-3	SW02	Soluble	Solid	DI Leach	
890-7607-4	FS03	Soluble	Solid	DI Leach	
890-7607-5	FS04	Soluble	Solid	DI Leach	
890-7607-6	FS05	Soluble	Solid	DI Leach	
890-7607-7	FS06	Soluble	Solid	DI Leach	
890-7607-8	FS07	Soluble	Solid	DI Leach	
890-7607-9	SW03	Soluble	Solid	DI Leach	
890-7607-10	SW04	Soluble	Solid	DI Leach	
MB 880-101613/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-101613/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-101613/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7607-1 MS	FS02	Soluble	Solid	DI Leach	
890-7607-1 MSD	FS02	Soluble	Solid	DI Leach	

Leach Batch: 101614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-11	SW05	Soluble	Solid	DI Leach	
890-7607-12	SW06	Soluble	Solid	DI Leach	
890-7607-13	FS08	Soluble	Solid	DI Leach	
890-7607-14	FS09	Soluble	Solid	DI Leach	
890-7607-15	FS10	Soluble	Solid	DI Leach	
890-7607-16	FS11	Soluble	Solid	DI Leach	
890-7607-17	FS12	Soluble	Solid	DI Leach	
890-7607-18	SW07	Soluble	Solid	DI Leach	
890-7607-19	SW08	Soluble	Solid	DI Leach	
890-7607-20	SW09	Soluble	Solid	DI Leach	
890-7607-21	FS13	Soluble	Solid	DI Leach	
890-7607-22	SW10	Soluble	Solid	DI Leach	
890-7607-23	SW11	Soluble	Solid	DI Leach	
MB 880-101614/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-101614/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-101614/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7607-11 MS	SW05	Soluble	Solid	DI Leach	
890-7607-11 MSD	SW05	Soluble	Solid	DI Leach	
890-7607-21 MS	FS13	Soluble	Solid	DI Leach	
890-7607-21 MSD	FS13	Soluble	Solid	DI Leach	

Analysis Batch: 101668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-11	SW05	Soluble	Solid	300.0	101614
890-7607-12	SW06	Soluble	Solid	300.0	101614
890-7607-13	FS08	Soluble	Solid	300.0	101614
890-7607-14	FS09	Soluble	Solid	300.0	101614
890-7607-15	FS10	Soluble	Solid	300.0	101614
890-7607-16	FS11	Soluble	Solid	300.0	101614
890-7607-17	FS12	Soluble	Solid	300.0	101614
890-7607-18	SW07	Soluble	Solid	300.0	101614
890-7607-19	SW08	Soluble	Solid	300.0	101614
890-7607-20	SW09	Soluble	Solid	300.0	101614

QC Association Summary

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

HPLC/IC (Continued)

Analysis Batch: 101668 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-21	FS13	Soluble	Solid	300.0	101614
890-7607-22	SW10	Soluble	Solid	300.0	101614
890-7607-23	SW11	Soluble	Solid	300.0	101614
MB 880-101614/1-A	Method Blank	Soluble	Solid	300.0	101614
LCS 880-101614/2-A	Lab Control Sample	Soluble	Solid	300.0	101614
LCSD 880-101614/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	101614
890-7607-11 MS	SW05	Soluble	Solid	300.0	101614
890-7607-11 MSD	SW05	Soluble	Solid	300.0	101614
890-7607-21 MS	FS13	Soluble	Solid	300.0	101614
890-7607-21 MSD	FS13	Soluble	Solid	300.0	101614

Analysis Batch: 101669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7607-1	FS02	Soluble	Solid	300.0	101613
890-7607-2	SW01	Soluble	Solid	300.0	101613
890-7607-3	SW02	Soluble	Solid	300.0	101613
890-7607-4	FS03	Soluble	Solid	300.0	101613
890-7607-5	FS04	Soluble	Solid	300.0	101613
890-7607-6	FS05	Soluble	Solid	300.0	101613
890-7607-7	FS06	Soluble	Solid	300.0	101613
890-7607-8	FS07	Soluble	Solid	300.0	101613
890-7607-9	SW03	Soluble	Solid	300.0	101613
890-7607-10	SW04	Soluble	Solid	300.0	101613
MB 880-101613/1-A	Method Blank	Soluble	Solid	300.0	101613
LCS 880-101613/2-A	Lab Control Sample	Soluble	Solid	300.0	101613
LCSD 880-101613/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	101613
890-7607-1 MS	FS02	Soluble	Solid	300.0	101613
890-7607-1 MSD	FS02	Soluble	Solid	300.0	101613

Lab Chronicle

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS02

Date Collected: 01/28/25 11:10
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-1
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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 13:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 13:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 18:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 18:22	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 21:03	CH	EET MID

Client Sample ID: SW01

Date Collected: 01/28/25 11:15
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 13:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 13:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 19:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 19:11	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 21:21	CH	EET MID

Client Sample ID: SW02

Date Collected: 01/28/25 11:20
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-3
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			4.97 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 14:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 14:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 19:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 19:27	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	101669	02/01/25 21:27	CH	EET MID

Client Sample ID: FS03

Date Collected: 01/28/25 11:25
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 14:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 14:33	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS03
Date Collected: 01/28/25 11:25
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			101876	01/31/25 19:43	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 19:43	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 21:45	CH	EET MID

Client Sample ID: FS04
Date Collected: 01/28/25 11:30
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-5
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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 14:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 14:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 19:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 19:58	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 21:51	CH	EET MID

Client Sample ID: FS05
Date Collected: 01/28/25 11:35
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-6
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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 15:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 15:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 20:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 20:15	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 21:57	CH	EET MID

Client Sample ID: FS06
Date Collected: 01/28/25 11:45
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 15:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 15:34	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 20:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 20:31	TKC	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS06
Date Collected: 01/28/25 11:45
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 22:03	CH	EET MID

Client Sample ID: FS07
Date Collected: 01/28/25 11:50
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 15:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 15:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 20:47	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 20:47	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 22:09	CH	EET MID

Client Sample ID: SW03
Date Collected: 01/28/25 11:55
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 16:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 16:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 21:02	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 21:02	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 22:15	CH	EET MID

Client Sample ID: SW04
Date Collected: 01/28/25 12:00
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 16:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 16:35	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 21:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 21:18	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	101613	01/30/25 11:27	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101669	02/01/25 22:21	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: SW05

Lab Sample ID: 890-7607-11
Matrix: Solid
Date Collected: 01/28/25 12:05
Date Received: 01/29/25 15:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 18:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 18:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 21:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 21:50	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 06:37	SMC	EET MID

Client Sample ID: SW06

Lab Sample ID: 890-7607-12
Matrix: Solid
Date Collected: 01/28/25 12:10
Date Received: 01/29/25 15:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 18:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 18:45	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 22:06	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 22:06	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 06:55	SMC	EET MID

Client Sample ID: FS08

Lab Sample ID: 890-7607-13
Matrix: Solid
Date Collected: 01/28/25 12:15
Date Received: 01/29/25 15:05

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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 19:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 19:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 22:21	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 22:21	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 07:01	SMC	EET MID

Client Sample ID: FS09

Lab Sample ID: 890-7607-14
Matrix: Solid
Date Collected: 01/28/25 12:20
Date Received: 01/29/25 15:05

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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 19:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 19:26	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS09
Date Collected: 01/28/25 12:20
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-14
Matrix: Solid

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			101876	01/31/25 22:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 22:38	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 07:07	SMC	EET MID

Client Sample ID: FS10
Date Collected: 01/28/25 12:25
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 19:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 19:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 22:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 22:53	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 07:13	SMC	EET MID

Client Sample ID: FS11
Date Collected: 01/28/25 12:30
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-16
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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 20:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 20:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 23:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 23:10	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 07:48	SMC	EET MID

Client Sample ID: FS12
Date Collected: 01/28/25 12:35
Date Received: 01/29/25 15:05

Lab Sample ID: 890-7607-17
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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 20:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 20:28	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 23:25	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 23:25	TKC	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS12

Lab Sample ID: 890-7607-17
Matrix: Solid
Date Collected: 01/28/25 12:35
Date Received: 01/29/25 15:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 07:54	SMC	EET MID

Client Sample ID: SW07

Lab Sample ID: 890-7607-18
Matrix: Solid
Date Collected: 01/28/25 12:40
Date Received: 01/29/25 15:05

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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 20:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 20:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 23:41	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 23:41	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 08:00	SMC	EET MID

Client Sample ID: SW08

Lab Sample ID: 890-7607-19
Matrix: Solid
Date Collected: 01/28/25 12:43
Date Received: 01/29/25 15:05

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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 21:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 21:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 23:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	01/31/25 23:57	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 08:06	SMC	EET MID

Client Sample ID: SW09

Lab Sample ID: 890-7607-20
Matrix: Solid
Date Collected: 01/28/25 12:50
Date Received: 01/29/25 15:05

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	101564	01/30/25 09:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101551	01/30/25 21:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 21:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	02/01/25 00:13	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	101559	01/30/25 08:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101724	02/01/25 00:13	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 08:12	SMC	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Client Sample ID: FS13

Lab Sample ID: 890-7607-21
Matrix: Solid
Date Collected: 01/29/25 10:30
Date Received: 01/29/25 15:05

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	101557	01/30/25 08:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101550	01/30/25 18:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 18:57	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 18:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 18:22	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 08:18	SMC	EET MID

Client Sample ID: SW10

Lab Sample ID: 890-7607-22
Matrix: Solid
Date Collected: 01/29/25 10:35
Date Received: 01/29/25 15:05

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	101557	01/30/25 08:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101550	01/30/25 19:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 19:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 19:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 19:11	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 08:35	SMC	EET MID

Client Sample ID: SW11

Lab Sample ID: 890-7607-23
Matrix: Solid
Date Collected: 01/29/25 10:40
Date Received: 01/29/25 15:05

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	101557	01/30/25 08:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101550	01/30/25 19:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101740	01/30/25 19:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101876	01/31/25 19:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 19:27	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 08:41	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

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	06-30-25

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: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

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: Warren unit Battery #1

Job ID: 890-7607-1
SDG: 07A1988155

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7607-1	FS02	Solid	01/28/25 11:10	01/29/25 15:05	4
890-7607-2	SW01	Solid	01/28/25 11:15	01/29/25 15:05	0-4
890-7607-3	SW02	Solid	01/28/25 11:20	01/29/25 15:05	0-4
890-7607-4	FS03	Solid	01/28/25 11:25	01/29/25 15:05	4
890-7607-5	FS04	Solid	01/28/25 11:30	01/29/25 15:05	4
890-7607-6	FS05	Solid	01/28/25 11:35	01/29/25 15:05	4
890-7607-7	FS06	Solid	01/28/25 11:45	01/29/25 15:05	4
890-7607-8	FS07	Solid	01/28/25 11:50	01/29/25 15:05	4
890-7607-9	SW03	Solid	01/28/25 11:55	01/29/25 15:05	0-4
890-7607-10	SW04	Solid	01/28/25 12:00	01/29/25 15:05	0-4
890-7607-11	SW05	Solid	01/28/25 12:05	01/29/25 15:05	0-4
890-7607-12	SW06	Solid	01/28/25 12:10	01/29/25 15:05	0-4
890-7607-13	FS08	Solid	01/28/25 12:15	01/29/25 15:05	4
890-7607-14	FS09	Solid	01/28/25 12:20	01/29/25 15:05	4
890-7607-15	FS10	Solid	01/28/25 12:25	01/29/25 15:05	4
890-7607-16	FS11	Solid	01/28/25 12:30	01/29/25 15:05	4
890-7607-17	FS12	Solid	01/28/25 12:35	01/29/25 15:05	4
890-7607-18	SW07	Solid	01/28/25 12:40	01/29/25 15:05	0-4
890-7607-19	SW08	Solid	01/28/25 12:43	01/29/25 15:05	0-4
890-7607-20	SW09	Solid	01/28/25 12:50	01/29/25 15:05	0-4
890-7607-21	FS13	Solid	01/29/25 10:30	01/29/25 15:05	4
890-7607-22	SW10	Solid	01/29/25 10:35	01/29/25 15:05	0-4
890-7607-23	SW11	Solid	01/29/25 10:40	01/29/25 15:05	0-4

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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 O
890-7607 Chain of Custody

2/3/2025

www.xenco.com Page 1 of 3

Project Manager:	Devin Hencmann	Bill to: (if different)	Billy Gin
Company Name:	Ensolum	Company Name:	Hilcorp
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	805-798-2608	Email:	Dhencmann@ensolum.com,

Work Order Comments

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

Project Name:	Warren Unit Battery #1	Turn Around	
Project Number:	07A1988155	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	Yes No	Thermometer ID:	T@2007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	-0.1
Total Containers:		Corrected Temperature:	-0.3

ANALYSIS REQUEST — Pres. Code / Parameters

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
FS02	S	1-28-25	1110	4	C	1	/	/	/
SW01	↓	↓	1115	0-4	↓	↓	↓	↓	↓
SW02	↓	↓	1120	0-4	↓	↓	↓	↓	↓
FS03	↓	↓	1125	4	↓	↓	↓	↓	↓
FS04	↓	↓	1130	↓	↓	↓	↓	↓	↓
FS05	↓	↓	1135	↓	↓	↓	↓	↓	↓
FS06	↓	↓	1145	↓	↓	↓	↓	↓	↓
FS07	↓	↓	1150	↓	↓	↓	↓	↓	↓
SW03	↓	↓	1155	0-4	↓	↓	↓	↓	↓
SW04	↓	↓	1200	↓	↓	↓	↓	↓	↓

Preservative Codes

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

Sample Comments

Incident ID:
nAPP2500352359

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	14:44 1/29	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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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 2 of 3

Project Manager:	Devin Hencmann	Bill to: (if different)	Billy Gin
Company Name:	Ensolum	Company Name:	Hilcorp
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	805-798-2608	Email:	Dhencmann@ensolum.com,

Work Order Comments

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

Project Name:	~~Warren Unit Battery #1~~	Turn Around	☑ Routine ☐ Rush
Project Number:	07A1988155	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

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

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
SW05	S	1-28-25	1205	0-4	C	1				
SW06			1210	0-4						
FS08			1215	4						
FS09			1220							
FS10			1225							
FS11			1230							
FS12			1235							
SW07			1240	0-4						
SW08			1245							
SW09			1250							

Sample Comments

Incident ID:
nAPP2500352359

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1/9: 44 1/01	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

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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

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Work Order No: _____

Project Manager:	Devin Hencmann	Bill to: (if different)	Billy Gin
Company Name:	Ensolum	Company Name:	Hilcorp
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	805-798-2608	Email:	Dhencmann@ensolum.com,

Work Order Comments

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

Project Name:	Warren Unit Battery #1	Turn Around	☑ Routine ☐ Rush
Project Number:	07A1988155	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

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

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
FS13	S	1-29-25	1030	4	C	1		✓	✓	✓
SW10	S	↓	1035	0-4	↓	↓				
SW11	S	↓	1040	0-4	↓	↓				
										CW

Parameters

Preservative Codes

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

Sample Comments

Incident ID:
nAPP2500352359

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

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

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

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

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7607-1
SDG Number: 07A1988155

Login Number: 7607
List Number: 1
Creator: Lopez, Abraham

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: 890-7607-1
SDG Number: 07A1988155

Login Number: 7607
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 01/30/25 07:51 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Devin Hencmann
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 2/3/2025 12:34:01 PM

JOB DESCRIPTION

Warren Unit Battery #1
07A1988155

JOB NUMBER

890-7608-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

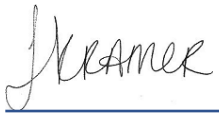
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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



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2/3/2025 12:34:01 PM

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

Client: Ensolum
Project/Site: Warren Unit Battery #1

Laboratory Job ID: 890-7608-1
SDG: 07A1988155

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum Job ID: 890-7608-1
Project: Warren Unit Battery #1

Job ID: 890-7608-1 Eurofins Carlsbad

Job Narrative
890-7608-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/29/2025 2:49 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 -0.3°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH01 (890-7608-1), BH01A (890-7608-2), BH02 (890-7608-3), BH02A (890-7608-4), BH03 (890-7608-5), BH03A (890-7608-6), BH04 (890-7608-7), BH04A (890-7608-8), PH0A (890-7608-9), PH01A (890-7608-10), PH02 (890-7608-11), PH02A (890-7608-12), PH03 (890-7608-13) and PH03A (890-7608-14).

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-101558 and analytical batch 880-101549 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 8021B: Surrogate recovery for the following sample was outside control limits: PH03A (890-7608-14). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (CCV 880-101547/20). 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.

Diesel Range Organics
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-101560 and analytical batch 880-101726 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH01 (890-7608-1), BH01A (890-7608-2), BH02 (890-7608-3), BH02A (890-7608-4), BH03 (890-7608-5), BH03A (890-7608-6), BH04 (890-7608-7), BH04A (890-7608-8), PH0A (890-7608-9), PH01A (890-7608-10), PH02 (890-7608-11), PH03 (890-7608-13), (890-7607-A-21-A), (890-7607-A-21-B MS) and (890-7607-A-21-C MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: PH02A (890-7608-12). Percent recoveries are based on the amount spiked.

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 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-101615 and analytical batch 880-101676 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Case Narrative

Client: Ensolum
Project: Warren Unit Battery #1

Job ID: 890-7608-1

Job ID: 890-7608-1 (Continued)

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH01

Lab Sample ID: 890-7608-1
Matrix: Solid
Date Collected: 01/29/25 11:00
Date Received: 01/29/25 14:49
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		01/30/25 09:34	01/30/25 14:19	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 14:19	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 14:19	1
m-Xylene & p-Xylene	<0.00399	U *-	0.00399		mg/Kg		01/30/25 09:34	01/30/25 14:19	1
o-Xylene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 14:19	1
Xylenes, Total	<0.00399	U *-	0.00399		mg/Kg		01/30/25 09:34	01/30/25 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/30/25 09:34*	*01/30/25 14:19*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*01/30/25 09:34*	*01/30/25 14:19*	*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			01/30/25 14:19	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			01/31/25 19:43	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		01/30/25 09:00	01/31/25 19:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 19:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 19:43*	*1*
o-Terphenyl	*118*		*70 - 130*	*01/30/25 09:00*	*01/31/25 19:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			01/31/25 08:59	1

Client Sample ID: BH01A

Lab Sample ID: 890-7608-2
Matrix: Solid
Date Collected: 01/29/25 11:05
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *-	0.00201		mg/Kg		01/30/25 09:34	01/30/25 14:40	1
Toluene	<0.00201	U *-	0.00201		mg/Kg		01/30/25 09:34	01/30/25 14:40	1
Ethylbenzene	<0.00201	U *-	0.00201		mg/Kg		01/30/25 09:34	01/30/25 14:40	1
m-Xylene & p-Xylene	<0.00402	U *-	0.00402		mg/Kg		01/30/25 09:34	01/30/25 14:40	1
o-Xylene	<0.00201	U *-	0.00201		mg/Kg		01/30/25 09:34	01/30/25 14:40	1
Xylenes, Total	<0.00402	U *-	0.00402		mg/Kg		01/30/25 09:34	01/30/25 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*01/30/25 09:34*	*01/30/25 14:40*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH01A

Lab Sample ID: 890-7608-2
Matrix: Solid
Date Collected: 01/29/25 11:05
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*01/30/25 09:34*	*01/30/25 14:40*	*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			01/30/25 14:40	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			01/31/25 19:58	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		01/30/25 09:00	01/31/25 19:58	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		01/30/25 09:00	01/31/25 19:58	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/30/25 09:00	01/31/25 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 19:58*	*1*
o-Terphenyl	*118*		*70 - 130*	*01/30/25 09:00*	*01/31/25 19:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1	mg/Kg			01/31/25 09:05	1

Client Sample ID: BH02

Lab Sample ID: 890-7608-3
Matrix: Solid
Date Collected: 01/29/25 11:10
Date Received: 01/29/25 14:49
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		01/30/25 09:34	01/30/25 15:00	1
Toluene	<0.00200	U *-	0.00200	mg/Kg		01/30/25 09:34	01/30/25 15:00	1
Ethylbenzene	<0.00200	U *-	0.00200	mg/Kg		01/30/25 09:34	01/30/25 15:00	1
m-Xylene & p-Xylene	<0.00401	U *-	0.00401	mg/Kg		01/30/25 09:34	01/30/25 15:00	1
o-Xylene	<0.00200	U *-	0.00200	mg/Kg		01/30/25 09:34	01/30/25 15:00	1
Xylenes, Total	<0.00401	U *-	0.00401	mg/Kg		01/30/25 09:34	01/30/25 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*01/30/25 09:34*	*01/30/25 15:00*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*01/30/25 09:34*	*01/30/25 15:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/30/25 15:00	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			01/31/25 20:15	1

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Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH02

Lab Sample ID: 890-7608-3
Matrix: Solid
Date Collected: 01/29/25 11:10
Date Received: 01/29/25 14:49
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	<49.8	U	49.8		mg/Kg		01/30/25 09:00	01/31/25 20:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 09:00	01/31/25 20:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 09:00	01/31/25 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 20:15*	*1*
o-Terphenyl	*122*		*70 - 130*	*01/30/25 09:00*	*01/31/25 20:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			01/31/25 09:11	1

Client Sample ID: BH02A

Lab Sample ID: 890-7608-4
Matrix: Solid
Date Collected: 01/29/25 11:15
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 16:34	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 16:34	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 16:34	1
m-Xylene & p-Xylene	<0.00400	U *-	0.00400		mg/Kg		01/30/25 09:34	01/30/25 16:34	1
o-Xylene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 16:34	1
Xylenes, Total	<0.00400	U *-	0.00400		mg/Kg		01/30/25 09:34	01/30/25 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*01/30/25 09:34*	*01/30/25 16:34*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/30/25 09:34*	*01/30/25 16:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/30/25 16:34	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			01/31/25 20:31	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	<49.7	U	49.7		mg/Kg		01/30/25 09:00	01/31/25 20:31	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/30/25 09:00	01/31/25 20:31	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/30/25 09:00	01/31/25 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 20:31*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/30/25 09:00*	*01/31/25 20:31*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH02A

Lab Sample ID: 890-7608-4
Matrix: Solid
Date Collected: 01/29/25 11:15
Date Received: 01/29/25 14:49
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			01/31/25 09:17	1

Client Sample ID: BH03

Lab Sample ID: 890-7608-5
Matrix: Solid
Date Collected: 01/29/25 11:20
Date Received: 01/29/25 14:49
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		01/30/25 09:34	01/30/25 16:55	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 16:55	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 16:55	1
m-Xylene & p-Xylene	<0.00400	U *-	0.00400		mg/Kg		01/30/25 09:34	01/30/25 16:55	1
o-Xylene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 16:55	1
Xylenes, Total	<0.00400	U *-	0.00400		mg/Kg		01/30/25 09:34	01/30/25 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*01/30/25 09:34*	*01/30/25 16:55*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/30/25 09:34*	*01/30/25 16:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/30/25 16:55	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/31/25 20:47	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		01/30/25 09:00	01/31/25 20:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 20:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*144*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 20:47*	*1*
o-Terphenyl	*122*		*70 - 130*	*01/30/25 09:00*	*01/31/25 20:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.98	U	9.98		mg/Kg			01/31/25 09:23	1

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH03A

Lab Sample ID: 890-7608-6
Matrix: Solid
Date Collected: 01/29/25 11:25
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 17:15	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 17:15	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 17:15	1
m-Xylene & p-Xylene	<0.00399	U *-	0.00399		mg/Kg		01/30/25 09:34	01/30/25 17:15	1
o-Xylene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 17:15	1
Xylenes, Total	<0.00399	U *-	0.00399		mg/Kg		01/30/25 09:34	01/30/25 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*01/30/25 09:34*	*01/30/25 17:15*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*01/30/25 09:34*	*01/30/25 17:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/30/25 17:15	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			01/31/25 21:02	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		01/30/25 09:00	01/31/25 21:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 21:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 21:02*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/30/25 09:00*	*01/31/25 21:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U	9.96		mg/Kg			01/31/25 09:28	1

Client Sample ID: BH04

Lab Sample ID: 890-7608-7
Matrix: Solid
Date Collected: 01/29/25 11:30
Date Received: 01/29/25 14:49
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		01/30/25 09:34	01/30/25 17:36	1
Toluene	<0.00198	U *-	0.00198		mg/Kg		01/30/25 09:34	01/30/25 17:36	1
Ethylbenzene	<0.00198	U *-	0.00198		mg/Kg		01/30/25 09:34	01/30/25 17:36	1
m-Xylene & p-Xylene	<0.00396	U *-	0.00396		mg/Kg		01/30/25 09:34	01/30/25 17:36	1
o-Xylene	<0.00198	U *-	0.00198		mg/Kg		01/30/25 09:34	01/30/25 17:36	1
Xylenes, Total	<0.00396	U *-	0.00396		mg/Kg		01/30/25 09:34	01/30/25 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*01/30/25 09:34*	*01/30/25 17:36*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH04

Date Collected: 01/29/25 11:30
Date Received: 01/29/25 14:49
Sample Depth: 0.5

Lab Sample ID: 890-7608-7
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/30/25 09:34*	*01/30/25 17:36*	*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			01/30/25 17:36	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			01/31/25 21:18	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		01/30/25 09:00	01/31/25 21:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 21:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 21:18*	*1*
o-Terphenyl	*118*		*70 - 130*	*01/30/25 09:00*	*01/31/25 21:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94		mg/Kg			01/31/25 09:34	1

Client Sample ID: BH04A

Date Collected: 01/29/25 11:35
Date Received: 01/29/25 14:49
Sample Depth: 4

Lab Sample ID: 890-7608-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *-	0.00198		mg/Kg		01/30/25 09:34	01/30/25 17:56	1
Toluene	<0.00198	U *-	0.00198		mg/Kg		01/30/25 09:34	01/30/25 17:56	1
Ethylbenzene	<0.00198	U *-	0.00198		mg/Kg		01/30/25 09:34	01/30/25 17:56	1
m-Xylene & p-Xylene	<0.00397	U *-	0.00397		mg/Kg		01/30/25 09:34	01/30/25 17:56	1
o-Xylene	<0.00198	U *-	0.00198		mg/Kg		01/30/25 09:34	01/30/25 17:56	1
Xylenes, Total	<0.00397	U *-	0.00397		mg/Kg		01/30/25 09:34	01/30/25 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*01/30/25 09:34*	*01/30/25 17:56*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*01/30/25 09:34*	*01/30/25 17:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			01/30/25 17:56	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			01/31/25 21:50	1

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Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH04A

Lab Sample ID: 890-7608-8
Matrix: Solid
Date Collected: 01/29/25 11:35
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		01/30/25 09:00	01/31/25 21:50	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/30/25 09:00	01/31/25 21:50	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/30/25 09:00	01/31/25 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 21:50*	*1*
o-Terphenyl	*116*		*70 - 130*	*01/30/25 09:00*	*01/31/25 21:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.98	U	9.98		mg/Kg			02/01/25 21:17	1

Client Sample ID: PH0A

Lab Sample ID: 890-7608-9
Matrix: Solid
Date Collected: 01/29/25 11:40
Date Received: 01/29/25 14:49
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		01/30/25 09:34	01/30/25 18:17	1
Toluene	<0.00199	U *-	0.00199		mg/Kg		01/30/25 09:34	01/30/25 18:17	1
Ethylbenzene	<0.00199	U *-	0.00199		mg/Kg		01/30/25 09:34	01/30/25 18:17	1
m-Xylene & p-Xylene	<0.00398	U *-	0.00398		mg/Kg		01/30/25 09:34	01/30/25 18:17	1
o-Xylene	<0.00199	U *-	0.00199		mg/Kg		01/30/25 09:34	01/30/25 18:17	1
Xylenes, Total	<0.00398	U *-	0.00398		mg/Kg		01/30/25 09:34	01/30/25 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*01/30/25 09:34*	*01/30/25 18:17*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*01/30/25 09:34*	*01/30/25 18:17*	*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			01/30/25 18:17	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			01/31/25 22:06	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		01/30/25 09:00	01/31/25 22:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 22:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 22:06*	*1*
o-Terphenyl	*120*		*70 - 130*	*01/30/25 09:00*	*01/31/25 22:06*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: PH0A

Lab Sample ID: 890-7608-9
Matrix: Solid
Date Collected: 01/29/25 11:40
Date Received: 01/29/25 14:49
Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U F1	9.96		mg/Kg			02/01/25 21:23	1

Client Sample ID: PH01A

Lab Sample ID: 890-7608-10
Matrix: Solid
Date Collected: 01/29/25 11:45
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 18:37	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 18:37	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 18:37	1
m-Xylene & p-Xylene	<0.00401	U *-	0.00401		mg/Kg		01/30/25 09:34	01/30/25 18:37	1
o-Xylene	<0.00200	U *-	0.00200		mg/Kg		01/30/25 09:34	01/30/25 18:37	1
Xylenes, Total	<0.00401	U *-	0.00401		mg/Kg		01/30/25 09:34	01/30/25 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*01/30/25 09:34*	*01/30/25 18:37*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/30/25 09:34*	*01/30/25 18:37*	*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			01/30/25 18:37	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			01/31/25 22:21	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		01/30/25 09:00	01/31/25 22:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 22:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/30/25 09:00	01/31/25 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*154*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 22:21*	*1*
o-Terphenyl	*127*		*70 - 130*	*01/30/25 09:00*	*01/31/25 22:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.92	U	9.92		mg/Kg			02/01/25 21:40	1

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: PH02

Lab Sample ID: 890-7608-11
Matrix: Solid
Date Collected: 01/29/25 11:50
Date Received: 01/29/25 14:49
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		01/30/25 14:39	01/31/25 13:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/30/25 14:39	01/31/25 13:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/30/25 14:39	01/31/25 13:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/30/25 14:39	01/31/25 13:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/30/25 14:39	01/31/25 13:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/30/25 14:39	01/31/25 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*01/30/25 14:39*	*01/31/25 13:50*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*01/30/25 14:39*	*01/31/25 13:50*	*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			01/31/25 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			01/31/25 22:38	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		01/30/25 09:00	01/31/25 22:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 09:00	01/31/25 22:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 09:00	01/31/25 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 22:38*	*1*
o-Terphenyl	*116*		*70 - 130*	*01/30/25 09:00*	*01/31/25 22:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			02/01/25 21:46	1

Client Sample ID: PH02A

Lab Sample ID: 890-7608-12
Matrix: Solid
Date Collected: 01/29/25 11:55
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/30/25 14:39	01/31/25 14:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/30/25 14:39	01/31/25 14:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/30/25 14:39	01/31/25 14:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/30/25 14:39	01/31/25 14:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/30/25 14:39	01/31/25 14:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/30/25 14:39	01/31/25 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*01/30/25 14:39*	*01/31/25 14:10*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: PH02A

Lab Sample ID: 890-7608-12
Matrix: Solid
Date Collected: 01/29/25 11:55
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*01/30/25 14:39*	*01/31/25 14:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			01/31/25 14:10	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			01/31/25 22:53	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		01/30/25 09:00	01/31/25 22:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/30/25 09:00	01/31/25 22:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/30/25 09:00	01/31/25 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*161*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 22:53*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 22:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94	mg/Kg			02/01/25 22:04	1

Client Sample ID: PH03

Lab Sample ID: 890-7608-13
Matrix: Solid
Date Collected: 01/29/25 12:00
Date Received: 01/29/25 14:49
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		01/30/25 14:39	01/31/25 14:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/30/25 14:39	01/31/25 14:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/30/25 14:39	01/31/25 14:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/30/25 14:39	01/31/25 14:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/30/25 14:39	01/31/25 14:30	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/30/25 14:39	01/31/25 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*01/30/25 14:39*	*01/31/25 14:30*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*01/30/25 14:39*	*01/31/25 14:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/31/25 14:30	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			01/31/25 23:10	1

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: PH03

Lab Sample ID: 890-7608-13
Matrix: Solid
Date Collected: 01/29/25 12:00
Date Received: 01/29/25 14:49
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	50.0		mg/Kg		01/30/25 09:00	01/31/25 23:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 23:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/30/25 09:00	01/31/25 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 23:10*	*1*
o-Terphenyl	*124*		*70 - 130*	*01/30/25 09:00*	*01/31/25 23:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.92	U	9.92		mg/Kg			02/01/25 22:10	1

Client Sample ID: PH03A

Lab Sample ID: 890-7608-14
Matrix: Solid
Date Collected: 01/29/25 12:05
Date Received: 01/29/25 14:49
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:41	01/30/25 14:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:41	01/30/25 14:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:41	01/30/25 14:18	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/30/25 09:41	01/30/25 14:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 09:41	01/30/25 14:18	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/30/25 09:41	01/30/25 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*148*	*S1+*	*70 - 130*	*01/30/25 09:41*	*01/30/25 14:18*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*01/30/25 09:41*	*01/30/25 14:18*	*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			01/30/25 14:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			01/31/25 23:25	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		01/30/25 09:00	01/31/25 23:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/30/25 09:00	01/31/25 23:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/30/25 09:00	01/31/25 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*01/30/25 09:00*	*01/31/25 23:25*	*1*
o-Terphenyl	*118*		*70 - 130*	*01/30/25 09:00*	*01/31/25 23:25*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: PH03A
Date Collected: 01/29/25 12:05
Date Received: 01/29/25 14:49
Sample Depth: 4

Lab Sample ID: 890-7608-14
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			02/01/25 22:16	1

Surrogate Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-53825-A-141-B MS	Matrix Spike	103	100
880-53825-A-141-C MSD	Matrix Spike Duplicate	100	100
890-7608-1	BH01	99	108
890-7608-2	BH01A	91	111
890-7608-3	BH02	92	107
890-7608-4	BH02A	94	110
890-7608-5	BH03	94	110
890-7608-6	BH03A	96	109
890-7608-7	BH04	98	110
890-7608-8	BH04A	93	111
890-7608-9	PH0A	97	107
890-7608-10	PH01A	93	110
890-7608-11	PH02	109	98
890-7608-12	PH02A	106	96
890-7608-13	PH03	112	98
890-7608-14	PH03A	148 S1+	81
890-7609-A-7-C MS	Matrix Spike	148 S1+	82
890-7609-A-7-D MSD	Matrix Spike Duplicate	142 S1+	82
890-7609-A-19-C MS	Matrix Spike	93	126
890-7609-A-19-D MSD	Matrix Spike Duplicate	95	120
LCS 880-101554/1-A	Lab Control Sample	145 S1+	86
LCS 880-101558/1-A	Lab Control Sample	92	115
LCS 880-101653/1-A	Lab Control Sample	97	99
LCSD 880-101554/2-A	Lab Control Sample Dup	140 S1+	82
LCSD 880-101558/2-A	Lab Control Sample Dup	93	115
LCSD 880-101653/2-A	Lab Control Sample Dup	95	98
MB 880-101554/5-A	Method Blank	143 S1+	81
MB 880-101558/5-A	Method Blank	92	102
MB 880-101653/5-A	Method Blank	103	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)
890-7607-A-21-B MS	Matrix Spike	138 S1+	126
890-7607-A-21-C MSD	Matrix Spike Duplicate	137 S1+	127
890-7608-1	BH01	140 S1+	118
890-7608-2	BH01A	139 S1+	118
890-7608-3	BH02	139 S1+	122
890-7608-4	BH02A	135 S1+	111
890-7608-5	BH03	144 S1+	122
890-7608-6	BH03A	131 S1+	111
890-7608-7	BH04	137 S1+	118
890-7608-8	BH04A	132 S1+	116

Surrogate Summary

Client: Ensolum Job ID: 890-7608-1
Project/Site: Warren Unit Battery #1 SDG: 07A1988155

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-7608-9	PH0A	147 S1+	120										
890-7608-10	PH01A	154 S1+	127										
890-7608-11	PH02	140 S1+	116										
890-7608-12	PH02A	161 S1+	136 S1+										
890-7608-13	PH03	141 S1+	124										
890-7608-14	PH03A	139 S1+	118										
LCS 880-101560/2-A	Lab Control Sample	125	117										
LCSD 880-101560/3-A	Lab Control Sample Dup	130	119										
MB 880-101560/1-A	Method Blank	144 S1+	125										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-101554/5-A
Matrix: Solid
Analysis Batch: 101547

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 101554

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:37	01/30/25 11:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:37	01/30/25 11:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:37	01/30/25 11:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/30/25 08:37	01/30/25 11:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:37	01/30/25 11:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/30/25 08:37	01/30/25 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*	*01/30/25 08:37*	*01/30/25 11:34*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*01/30/25 08:37*	*01/30/25 11:34*	*1*

Lab Sample ID: LCS 880-101554/1-A
Matrix: Solid
Analysis Batch: 101547

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101554

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08033		mg/Kg		80	70 - 130		
Toluene			0.100	0.07736		mg/Kg		77	70 - 130		
Ethylbenzene			0.100	0.07810		mg/Kg		78	70 - 130		
m-Xylene & p-Xylene			0.200	0.1672		mg/Kg		84	70 - 130		
o-Xylene			0.100	0.08720		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: LCSD 880-101554/2-A
Matrix: Solid
Analysis Batch: 101547

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101554

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08979		mg/Kg		90	70 - 130	11	35
Toluene			0.100	0.08388		mg/Kg		84	70 - 130	8	35
Ethylbenzene			0.100	0.08462		mg/Kg		85	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.1803		mg/Kg		90	70 - 130	8	35
o-Xylene			0.100	0.09335		mg/Kg		93	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*

Lab Sample ID: 890-7609-A-7-C MS
Matrix: Solid
Analysis Batch: 101547

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 101554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.1115		mg/Kg		111	70 - 130		
Toluene	<0.00200	U	0.100	0.09599		mg/Kg		96	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

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

Lab Sample ID: 890-7609-A-7-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 101547 — **Prep Batch: 101554**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.09840		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2007		mg/Kg		100	70 - 130
o-Xylene	<0.00200	U	0.100	0.1011		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*148*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*

Lab Sample ID: 890-7609-A-7-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 101547 — **Prep Batch: 101554**

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	0.1166		mg/Kg		117	70 - 130	4	35
Toluene	<0.00200	U	0.100	0.1020		mg/Kg		102	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.100	0.1014		mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2155		mg/Kg		108	70 - 130	7	35
o-Xylene	<0.00200	U	0.100	0.1086		mg/Kg		109	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*142*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*

Lab Sample ID: MB 880-101558/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 101549 — **Prep Batch: 101558**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:55	01/30/25 11:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:55	01/30/25 11:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:55	01/30/25 11:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/30/25 08:55	01/30/25 11:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 08:55	01/30/25 11:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/30/25 08:55	01/30/25 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*01/30/25 08:55*	*01/30/25 11:34*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/30/25 08:55*	*01/30/25 11:34*	*1*

Lab Sample ID: LCS 880-101558/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 101549 — **Prep Batch: 101558**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.06715	*-	mg/Kg		67	70 - 130
Toluene	0.100	0.05872	*-	mg/Kg		59	70 - 130
Ethylbenzene	0.100	0.06264	*-	mg/Kg		63	70 - 130
m-Xylene & p-Xylene	0.200	0.1328	*-	mg/Kg		66	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

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

Lab Sample ID: LCS 880-101558/1-A
Matrix: Solid
Analysis Batch: 101549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101558

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.06825	*-	mg/Kg		68	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: LCSD 880-101558/2-A
Matrix: Solid
Analysis Batch: 101549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101558

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.06013	*-	mg/Kg		60	70 - 130	11	35
Toluene			0.100	0.05237	*-	mg/Kg		52	70 - 130	11	35
Ethylbenzene			0.100	0.05406	*-	mg/Kg		54	70 - 130	15	35
m-Xylene & p-Xylene			0.200	0.1156	*-	mg/Kg		58	70 - 130	14	35
o-Xylene			0.100	0.06085	*-	mg/Kg		61	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: 890-7609-A-19-C MS
Matrix: Solid
Analysis Batch: 101549

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 101558

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U *-	0.100	0.1026		mg/Kg		103	70 - 130		
Toluene	<0.00200	U *-	0.100	0.09100		mg/Kg		91	70 - 130		
Ethylbenzene	<0.00200	U *-	0.100	0.09963		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene	<0.00401	U *-	0.200	0.2070		mg/Kg		104	70 - 130		
o-Xylene	<0.00200	U *-	0.100	0.1016		mg/Kg		102	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*

Lab Sample ID: 890-7609-A-19-D MSD
Matrix: Solid
Analysis Batch: 101549

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 101558

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	0.09509		mg/Kg		95	70 - 130	8	35
Toluene	<0.00200	U *-	0.100	0.08397		mg/Kg		84	70 - 130	8	35
Ethylbenzene	<0.00200	U *-	0.100	0.09110		mg/Kg		91	70 - 130	9	35
m-Xylene & p-Xylene	<0.00401	U *-	0.200	0.1903		mg/Kg		95	70 - 130	8	35
o-Xylene	<0.00200	U *-	0.100	0.09340		mg/Kg		93	70 - 130	8	35

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

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

Lab Sample ID: 890-7609-A-19-D MSD
Matrix: Solid
Analysis Batch: 101549

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 101558

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

Lab Sample ID: MB 880-101653/5-A
Matrix: Solid
Analysis Batch: 101706

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 101653

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/30/25 14:39	01/31/25 11:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/30/25 14:39	01/31/25 11:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/30/25 14:39	01/31/25 11:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/30/25 14:39	01/31/25 11:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/30/25 14:39	01/31/25 11:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/30/25 14:39	01/31/25 11:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	01/30/25 14:39	01/31/25 11:04	1
1,4-Difluorobenzene (Surr)	95		70 - 130	01/30/25 14:39	01/31/25 11:04	1

Lab Sample ID: LCS 880-101653/1-A
Matrix: Solid
Analysis Batch: 101706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101653

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08089		mg/Kg		81	70 - 130		
Toluene			0.100	0.08323		mg/Kg		83	70 - 130		
Ethylbenzene			0.100	0.08600		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene			0.200	0.1630		mg/Kg		81	70 - 130		
o-Xylene			0.100	0.08300		mg/Kg		83	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-101653/2-A
Matrix: Solid
Analysis Batch: 101706

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101653

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07490		mg/Kg		75	70 - 130	8	35
Toluene			0.100	0.07692		mg/Kg		77	70 - 130	8	35
Ethylbenzene			0.100	0.07861		mg/Kg		79	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1485		mg/Kg		74	70 - 130	9	35
o-Xylene			0.100	0.07636		mg/Kg		76	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

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

Lab Sample ID: LCSD 880-101653/2-A
Matrix: Solid
Analysis Batch: 101706

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101653

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

Lab Sample ID: 880-53825-A-141-B MS
Matrix: Solid
Analysis Batch: 101706

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 101653

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.09130		mg/Kg		91	70 - 130
Toluene	<0.00200	U	0.100	0.09221		mg/Kg		92	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.09345		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1753		mg/Kg		88	70 - 130
o-Xylene	<0.00200	U	0.100	0.08843		mg/Kg		88	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-53825-A-141-C MSD
Matrix: Solid
Analysis Batch: 101706

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 101653

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	0.09114		mg/Kg		91	70 - 130	0	35
Toluene	<0.00200	U	0.100	0.09214		mg/Kg		92	70 - 130	0	35
Ethylbenzene	<0.00200	U	0.100	0.09238		mg/Kg		92	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1724		mg/Kg		86	70 - 130	2	35
o-Xylene	<0.00200	U	0.100	0.08703		mg/Kg		87	70 - 130	2	35

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

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

Lab Sample ID: MB 880-101560/1-A
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 101560

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		01/30/25 09:00	01/31/25 17:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/30/25 09:00	01/31/25 17:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/30/25 09:00	01/31/25 17:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130	01/30/25 09:00	01/31/25 17:35	1
o-Terphenyl	125		70 - 130	01/30/25 09:00	01/31/25 17:35	1

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QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

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

Lab Sample ID: LCS 880-101560/2-A
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 101560

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1055		mg/Kg		106	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1089		mg/Kg		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*125*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: LCSD 880-101560/3-A
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 101560

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1060		mg/Kg		106	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1109		mg/Kg		111	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*130*		*70 - 130*
o-Terphenyl	*119*		*70 - 130*

Lab Sample ID: 890-7607-A-21-B MS
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 101560

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	995	1049		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	995	1109		mg/Kg		111	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*138*	*S1+*	*70 - 130*
o-Terphenyl	*126*		*70 - 130*

Lab Sample ID: 890-7607-A-21-C MSD
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 101560

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	995	1082		mg/Kg		109	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	995	1118		mg/Kg		112	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*137*	*S1+*	*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

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

Lab Sample ID: 890-7607-A-21-C MSD
Matrix: Solid
Analysis Batch: 101726

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 101560

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	127		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-101614/1-A
Matrix: Solid
Analysis Batch: 101668

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/31/25 06:20	1

Lab Sample ID: LCS 880-101614/2-A
Matrix: Solid
Analysis Batch: 101668

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	273.1		mg/Kg		109	90 - 110		

Lab Sample ID: LCSD 880-101614/3-A
Matrix: Solid
Analysis Batch: 101668

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	273.5		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 890-7607-A-21-F MS
Matrix: Solid
Analysis Batch: 101668

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	<10.0	U	250	282.7		mg/Kg		109	90 - 110		

Lab Sample ID: 890-7607-A-21-G MSD
Matrix: Solid
Analysis Batch: 101668

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	<10.0	U	250	283.6		mg/Kg		110	90 - 110	0	20

Lab Sample ID: MB 880-101615/1-A
Matrix: Solid
Analysis Batch: 101676

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			02/01/25 19:43	1

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-101615/2-A
Matrix: Solid
Analysis Batch: 101676

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	274.6		mg/Kg		110	90 - 110		

Lab Sample ID: LCSD 880-101615/3-A
Matrix: Solid
Analysis Batch: 101676

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	275.1		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 890-7608-9 MS
Matrix: Solid
Analysis Batch: 101676

Client Sample ID: PH0A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	<9.96	U F1	249	317.1	F1	mg/Kg		126	90 - 110		

Lab Sample ID: 890-7608-9 MSD
Matrix: Solid
Analysis Batch: 101676

Client Sample ID: PH0A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<9.96	U F1	249	317.3	F1	mg/Kg		126	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

GC VOA

Analysis Batch: 101547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-14	PH03A	Total/NA	Solid	8021B	101554
MB 880-101554/5-A	Method Blank	Total/NA	Solid	8021B	101554
LCS 880-101554/1-A	Lab Control Sample	Total/NA	Solid	8021B	101554
LCSD 880-101554/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	101554
890-7609-A-7-C MS	Matrix Spike	Total/NA	Solid	8021B	101554
890-7609-A-7-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	101554

Analysis Batch: 101549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-1	BH01	Total/NA	Solid	8021B	101558
890-7608-2	BH01A	Total/NA	Solid	8021B	101558
890-7608-3	BH02	Total/NA	Solid	8021B	101558
890-7608-4	BH02A	Total/NA	Solid	8021B	101558
890-7608-5	BH03	Total/NA	Solid	8021B	101558
890-7608-6	BH03A	Total/NA	Solid	8021B	101558
890-7608-7	BH04	Total/NA	Solid	8021B	101558
890-7608-8	BH04A	Total/NA	Solid	8021B	101558
890-7608-9	PH0A	Total/NA	Solid	8021B	101558
890-7608-10	PH01A	Total/NA	Solid	8021B	101558
MB 880-101558/5-A	Method Blank	Total/NA	Solid	8021B	101558
LCS 880-101558/1-A	Lab Control Sample	Total/NA	Solid	8021B	101558
LCSD 880-101558/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	101558
890-7609-A-19-C MS	Matrix Spike	Total/NA	Solid	8021B	101558
890-7609-A-19-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	101558

Prep Batch: 101554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-14	PH03A	Total/NA	Solid	5035	
MB 880-101554/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-101554/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-101554/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7609-A-7-C MS	Matrix Spike	Total/NA	Solid	5035	
890-7609-A-7-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 101558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-1	BH01	Total/NA	Solid	5035	
890-7608-2	BH01A	Total/NA	Solid	5035	
890-7608-3	BH02	Total/NA	Solid	5035	
890-7608-4	BH02A	Total/NA	Solid	5035	
890-7608-5	BH03	Total/NA	Solid	5035	
890-7608-6	BH03A	Total/NA	Solid	5035	
890-7608-7	BH04	Total/NA	Solid	5035	
890-7608-8	BH04A	Total/NA	Solid	5035	
890-7608-9	PH0A	Total/NA	Solid	5035	
890-7608-10	PH01A	Total/NA	Solid	5035	
MB 880-101558/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-101558/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-101558/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7609-A-19-C MS	Matrix Spike	Total/NA	Solid	5035	
890-7609-A-19-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

GC VOA

Prep Batch: 101653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-11	PH02	Total/NA	Solid	5035	
890-7608-12	PH02A	Total/NA	Solid	5035	
890-7608-13	PH03	Total/NA	Solid	5035	
MB 880-101653/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-101653/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-101653/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-53825-A-141-B MS	Matrix Spike	Total/NA	Solid	5035	
880-53825-A-141-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 101662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-1	BH01	Total/NA	Solid	Total BTEX	
890-7608-2	BH01A	Total/NA	Solid	Total BTEX	
890-7608-3	BH02	Total/NA	Solid	Total BTEX	
890-7608-4	BH02A	Total/NA	Solid	Total BTEX	
890-7608-5	BH03	Total/NA	Solid	Total BTEX	
890-7608-6	BH03A	Total/NA	Solid	Total BTEX	
890-7608-7	BH04	Total/NA	Solid	Total BTEX	
890-7608-8	BH04A	Total/NA	Solid	Total BTEX	
890-7608-9	PH0A	Total/NA	Solid	Total BTEX	
890-7608-10	PH01A	Total/NA	Solid	Total BTEX	
890-7608-11	PH02	Total/NA	Solid	Total BTEX	
890-7608-12	PH02A	Total/NA	Solid	Total BTEX	
890-7608-13	PH03	Total/NA	Solid	Total BTEX	
890-7608-14	PH03A	Total/NA	Solid	Total BTEX	

Analysis Batch: 101706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-11	PH02	Total/NA	Solid	8021B	101653
890-7608-12	PH02A	Total/NA	Solid	8021B	101653
890-7608-13	PH03	Total/NA	Solid	8021B	101653
MB 880-101653/5-A	Method Blank	Total/NA	Solid	8021B	101653
LCS 880-101653/1-A	Lab Control Sample	Total/NA	Solid	8021B	101653
LCSD 880-101653/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	101653
880-53825-A-141-B MS	Matrix Spike	Total/NA	Solid	8021B	101653
880-53825-A-141-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	101653

GC Semi VOA

Prep Batch: 101560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-1	BH01	Total/NA	Solid	8015NM Prep	
890-7608-2	BH01A	Total/NA	Solid	8015NM Prep	
890-7608-3	BH02	Total/NA	Solid	8015NM Prep	
890-7608-4	BH02A	Total/NA	Solid	8015NM Prep	
890-7608-5	BH03	Total/NA	Solid	8015NM Prep	
890-7608-6	BH03A	Total/NA	Solid	8015NM Prep	
890-7608-7	BH04	Total/NA	Solid	8015NM Prep	
890-7608-8	BH04A	Total/NA	Solid	8015NM Prep	
890-7608-9	PH0A	Total/NA	Solid	8015NM Prep	
890-7608-10	PH01A	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

GC Semi VOA (Continued)

Prep Batch: 101560 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-11	PH02	Total/NA	Solid	8015NM Prep	
890-7608-12	PH02A	Total/NA	Solid	8015NM Prep	
890-7608-13	PH03	Total/NA	Solid	8015NM Prep	
890-7608-14	PH03A	Total/NA	Solid	8015NM Prep	
MB 880-101560/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-101560/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-101560/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7607-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-7607-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 101726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-1	BH01	Total/NA	Solid	8015B NM	101560
890-7608-2	BH01A	Total/NA	Solid	8015B NM	101560
890-7608-3	BH02	Total/NA	Solid	8015B NM	101560
890-7608-4	BH02A	Total/NA	Solid	8015B NM	101560
890-7608-5	BH03	Total/NA	Solid	8015B NM	101560
890-7608-6	BH03A	Total/NA	Solid	8015B NM	101560
890-7608-7	BH04	Total/NA	Solid	8015B NM	101560
890-7608-8	BH04A	Total/NA	Solid	8015B NM	101560
890-7608-9	PH0A	Total/NA	Solid	8015B NM	101560
890-7608-10	PH01A	Total/NA	Solid	8015B NM	101560
890-7608-11	PH02	Total/NA	Solid	8015B NM	101560
890-7608-12	PH02A	Total/NA	Solid	8015B NM	101560
890-7608-13	PH03	Total/NA	Solid	8015B NM	101560
890-7608-14	PH03A	Total/NA	Solid	8015B NM	101560
MB 880-101560/1-A	Method Blank	Total/NA	Solid	8015B NM	101560
LCS 880-101560/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	101560
LCSD 880-101560/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	101560
890-7607-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	101560
890-7607-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	101560

Analysis Batch: 101878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-1	BH01	Total/NA	Solid	8015 NM	
890-7608-2	BH01A	Total/NA	Solid	8015 NM	
890-7608-3	BH02	Total/NA	Solid	8015 NM	
890-7608-4	BH02A	Total/NA	Solid	8015 NM	
890-7608-5	BH03	Total/NA	Solid	8015 NM	
890-7608-6	BH03A	Total/NA	Solid	8015 NM	
890-7608-7	BH04	Total/NA	Solid	8015 NM	
890-7608-8	BH04A	Total/NA	Solid	8015 NM	
890-7608-9	PH0A	Total/NA	Solid	8015 NM	
890-7608-10	PH01A	Total/NA	Solid	8015 NM	
890-7608-11	PH02	Total/NA	Solid	8015 NM	
890-7608-12	PH02A	Total/NA	Solid	8015 NM	
890-7608-13	PH03	Total/NA	Solid	8015 NM	
890-7608-14	PH03A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

HPLC/IC

Leach Batch: 101614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-1	BH01	Soluble	Solid	DI Leach	
890-7608-2	BH01A	Soluble	Solid	DI Leach	
890-7608-3	BH02	Soluble	Solid	DI Leach	
890-7608-4	BH02A	Soluble	Solid	DI Leach	
890-7608-5	BH03	Soluble	Solid	DI Leach	
890-7608-6	BH03A	Soluble	Solid	DI Leach	
890-7608-7	BH04	Soluble	Solid	DI Leach	
MB 880-101614/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-101614/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-101614/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7607-A-21-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-7607-A-21-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 101615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-8	BH04A	Soluble	Solid	DI Leach	
890-7608-9	PH0A	Soluble	Solid	DI Leach	
890-7608-10	PH01A	Soluble	Solid	DI Leach	
890-7608-11	PH02	Soluble	Solid	DI Leach	
890-7608-12	PH02A	Soluble	Solid	DI Leach	
890-7608-13	PH03	Soluble	Solid	DI Leach	
890-7608-14	PH03A	Soluble	Solid	DI Leach	
MB 880-101615/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-101615/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-101615/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7608-9 MS	PH0A	Soluble	Solid	DI Leach	
890-7608-9 MSD	PH0A	Soluble	Solid	DI Leach	

Analysis Batch: 101668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-1	BH01	Soluble	Solid	300.0	101614
890-7608-2	BH01A	Soluble	Solid	300.0	101614
890-7608-3	BH02	Soluble	Solid	300.0	101614
890-7608-4	BH02A	Soluble	Solid	300.0	101614
890-7608-5	BH03	Soluble	Solid	300.0	101614
890-7608-6	BH03A	Soluble	Solid	300.0	101614
890-7608-7	BH04	Soluble	Solid	300.0	101614
MB 880-101614/1-A	Method Blank	Soluble	Solid	300.0	101614
LCS 880-101614/2-A	Lab Control Sample	Soluble	Solid	300.0	101614
LCSD 880-101614/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	101614
890-7607-A-21-F MS	Matrix Spike	Soluble	Solid	300.0	101614
890-7607-A-21-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	101614

Analysis Batch: 101676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-8	BH04A	Soluble	Solid	300.0	101615
890-7608-9	PH0A	Soluble	Solid	300.0	101615
890-7608-10	PH01A	Soluble	Solid	300.0	101615
890-7608-11	PH02	Soluble	Solid	300.0	101615
890-7608-12	PH02A	Soluble	Solid	300.0	101615
890-7608-13	PH03	Soluble	Solid	300.0	101615

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

HPLC/IC (Continued)

Analysis Batch: 101676 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7608-14	PH03A	Soluble	Solid	300.0	101615
MB 880-101615/1-A	Method Blank	Soluble	Solid	300.0	101615
LCS 880-101615/2-A	Lab Control Sample	Soluble	Solid	300.0	101615
LCSD 880-101615/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	101615
890-7608-9 MS	PH0A	Soluble	Solid	300.0	101615
890-7608-9 MSD	PH0A	Soluble	Solid	300.0	101615

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH01

Date Collected: 01/29/25 11:00
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 14:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 14:19	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 19:43	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 19:43	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 08:59	SMC	EET MID

Client Sample ID: BH01A

Date Collected: 01/29/25 11:05
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-2
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	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 14:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 14:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 19:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 19:58	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 09:05	SMC	EET MID

Client Sample ID: BH02

Date Collected: 01/29/25 11:10
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-3
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	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 15:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 15:00	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 20:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 20:15	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 09:11	SMC	EET MID

Client Sample ID: BH02A

Date Collected: 01/29/25 11:15
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 16:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 16:34	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH02A
Date Collected: 01/29/25 11:15
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			101878	01/31/25 20:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 20:31	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 09:17	SMC	EET MID

Client Sample ID: BH03
Date Collected: 01/29/25 11:20
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 16:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 16:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 20:47	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 20:47	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 09:23	SMC	EET MID

Client Sample ID: BH03A
Date Collected: 01/29/25 11:25
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 17:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 17:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 21:02	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 21:02	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 09:28	SMC	EET MID

Client Sample ID: BH04
Date Collected: 01/29/25 11:30
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 17:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 17:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 21:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 21:18	TKC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: BH04
Date Collected: 01/29/25 11:30
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	101614	01/30/25 11:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101668	01/31/25 09:34	SMC	EET MID

Client Sample ID: BH04A
Date Collected: 01/29/25 11:35
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 17:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 17:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 21:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 21:50	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	101615	01/30/25 11:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101676	02/01/25 21:17	CH	EET MID

Client Sample ID: PH0A
Date Collected: 01/29/25 11:40
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 18:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 18:17	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 22:06	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 22:06	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	101615	01/30/25 11:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101676	02/01/25 21:23	CH	EET MID

Client Sample ID: PH01A
Date Collected: 01/29/25 11:45
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	101558	01/30/25 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101549	01/30/25 18:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 18:37	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 22:21	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 22:21	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	101615	01/30/25 11:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101676	02/01/25 21:40	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: PH02

Lab Sample ID: 890-7608-11
Matrix: Solid
Date Collected: 01/29/25 11:50
Date Received: 01/29/25 14:49

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	101653	01/30/25 14:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101706	01/31/25 13:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/31/25 13:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 22:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 22:38	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	101615	01/30/25 11:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101676	02/01/25 21:46	CH	EET MID

Client Sample ID: PH02A

Lab Sample ID: 890-7608-12
Matrix: Solid
Date Collected: 01/29/25 11:55
Date Received: 01/29/25 14:49

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	101653	01/30/25 14:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101706	01/31/25 14:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/31/25 14:10	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 22:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 22:53	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	101615	01/30/25 11:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101676	02/01/25 22:04	CH	EET MID

Client Sample ID: PH03

Lab Sample ID: 890-7608-13
Matrix: Solid
Date Collected: 01/29/25 12:00
Date Received: 01/29/25 14:49

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	101653	01/30/25 14:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101706	01/31/25 14:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/31/25 14:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			101878	01/31/25 23:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 23:10	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	101615	01/30/25 11:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101676	02/01/25 22:10	CH	EET MID

Client Sample ID: PH03A

Lab Sample ID: 890-7608-14
Matrix: Solid
Date Collected: 01/29/25 12:05
Date Received: 01/29/25 14:49

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	101554	01/30/25 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	101547	01/30/25 14:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			101662	01/30/25 14:18	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Client Sample ID: PH03A

Date Collected: 01/29/25 12:05
Date Received: 01/29/25 14:49

Lab Sample ID: 890-7608-14

Matrix: Solid

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			101878	01/31/25 23:25	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	101560	01/30/25 09:00	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	101726	01/31/25 23:25	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	101615	01/30/25 11:31	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	101676	02/01/25 22:16	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: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

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	06-30-25

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: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

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: Warren Unit Battery #1

Job ID: 890-7608-1
SDG: 07A1988155

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7608-1	BH01	Solid	01/29/25 11:00	01/29/25 14:49	0.5
890-7608-2	BH01A	Solid	01/29/25 11:05	01/29/25 14:49	4
890-7608-3	BH02	Solid	01/29/25 11:10	01/29/25 14:49	0.5
890-7608-4	BH02A	Solid	01/29/25 11:15	01/29/25 14:49	4
890-7608-5	BH03	Solid	01/29/25 11:20	01/29/25 14:49	0.5
890-7608-6	BH03A	Solid	01/29/25 11:25	01/29/25 14:49	4
890-7608-7	BH04	Solid	01/29/25 11:30	01/29/25 14:49	0.5
890-7608-8	BH04A	Solid	01/29/25 11:35	01/29/25 14:49	4
890-7608-9	PH0A	Solid	01/29/25 11:40	01/29/25 14:49	0.5
890-7608-10	PH01A	Solid	01/29/25 11:45	01/29/25 14:49	4
890-7608-11	PH02	Solid	01/29/25 11:50	01/29/25 14:49	0.5
890-7608-12	PH02A	Solid	01/29/25 11:55	01/29/25 14:49	4
890-7608-13	PH03	Solid	01/29/25 12:00	01/29/25 14:49	0.5
890-7608-14	PH03A	Solid	01/29/25 12:05	01/29/25 14:49	4

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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

890-7608 Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Devin Hencmann	Bill to: (if different)	Billy Gin
Company Name:	Ensolum	Company Name:	Hilcorp
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	805-798-2608	Email:	Dhencmann@ensolum.com,

Work Order Comments

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

Project Name:	Warren Unit Battery #1	Turn Around	☑ Routine ☐ Rush
Project Number:	07A1988155	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TNM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	-0.1
Total Containers:		Corrected Temperature:	-0.3

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
BH01	S	1-23-25	1100	0.5	G	1				
BH01A			1105	4						
BH02			1110	0.5						
BH02A			1115	4						
BH03			1120	0.5						
BH03A			1125	4						
BH04			1130	0.5						
BH04A			1135	4						
PH01			1140	0.5						
PH01A			1145	4						

Parameters

Sample Comments

Incident ID:
nAPP2500352359

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1/29/25 1700			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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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 2 of 2

Project Manager:	Devin Hencmann	Bill to: (if different)	
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	805-798-2608	Email:	Dhencmann@ensolum.com,

Work Order Comments

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

~~Project Name:~~	Warren Unit Battery #1	Turn Around	☑ Routine ☐ Rush
Project Number:	07A1988155	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
PH02	S	1-29-25	1150	0.5	G	1			
PH02A			1155	4					
PH03			1200	0.5					
PH03A	↓	↓	1205	4	↓	↓	↓	↓	↓

CW

Preservative Codes

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

Sample Comments

Incident ID:
nAPP2500352359

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

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

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

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

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7608-1
SDG Number: 07A1988155

Login Number: 7608
List Number: 1
Creator: Lopez, Abraham

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: 890-7608-1
SDG Number: 07A1988155

Login Number: 7608
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 01/30/25 07:51 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Devin Hencmann
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 2/26/2025 8:43:40 AM

JOB DESCRIPTION

Warren Unit Battery #1 SWD
07A1988155

JOB NUMBER

890-7710-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

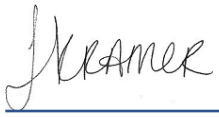
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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



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2/26/2025 8:43:40 AM

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

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Laboratory Job ID: 890-7710-1
SDG: 07A1988155

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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
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 Job ID: 890-7710-1
Project: Warren Unit Battery #1 SWD

Job ID: 890-7710-1 Eurofins Carlsbad

Job Narrative
890-7710-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/24/2025 2:05 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 -0.6°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS02 (890-7710-1), SS03 (890-7710-2) and SS04 (890-7710-3).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SS02 (890-7710-1), SS03 (890-7710-2) and SS04 (890-7710-3). 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.

Diesel Range Organics
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS02 (890-7710-1), SS03 (890-7710-2) and SS04 (890-7710-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-103580/2-A), (LCSD 880-103580/3-A), (890-7711-A-1-A), (890-7711-A-1-E MS) and (890-7711-A-1-F MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-103580 and analytical batch 880-103628 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-103580 and analytical batch 880-103628 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Client Sample ID: SS02

Lab Sample ID: 890-7710-1
Matrix: Solid
Date Collected: 02/24/25 11:15
Date Received: 02/24/25 14:05
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101		mg/Kg		02/25/25 08:42	02/25/25 14:41	50
Toluene	**2.54**		0.101		mg/Kg		02/25/25 08:42	02/25/25 14:41	50
Ethylbenzene	**7.45**		0.101		mg/Kg		02/25/25 08:42	02/25/25 14:41	50
m-Xylene & p-Xylene	**7.45**		0.201		mg/Kg		02/25/25 08:42	02/25/25 14:41	50
o-Xylene	**15.4**		0.101		mg/Kg		02/25/25 08:42	02/25/25 14:41	50
Xylenes, Total	**22.9**		0.201		mg/Kg		02/25/25 08:42	02/25/25 14:41	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*321*	*S1+*	*70 - 130*	*02/25/25 08:42*	*02/25/25 14:41*	*50*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*02/25/25 08:42*	*02/25/25 14:41*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**32.8**		0.201		mg/Kg			02/25/25 14:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**11900**		995		mg/Kg			02/25/25 10:54	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	<995	U	995		mg/Kg		02/24/25 17:19	02/25/25 10:54	20
Diesel Range Organics (Over C10-C28)	**11900**		995		mg/Kg		02/24/25 17:19	02/25/25 10:54	20
Oil Range Organics (Over C28-C36)	<995	U	995		mg/Kg		02/24/25 17:19	02/25/25 10:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*183*	*S1+*	*70 - 130*	*02/24/25 17:19*	*02/25/25 10:54*	*20*
o-Terphenyl	*320*	*S1+*	*70 - 130*	*02/24/25 17:19*	*02/25/25 10:54*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**623**		9.94		mg/Kg			02/26/25 03:45	1

Client Sample ID: SS03

Lab Sample ID: 890-7710-2
Matrix: Solid
Date Collected: 02/24/25 11:20
Date Received: 02/24/25 14:05
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.126**		0.0996		mg/Kg		02/25/25 08:42	02/25/25 15:01	50
Toluene	**2.44**		0.0996		mg/Kg		02/25/25 08:42	02/25/25 15:01	50
Ethylbenzene	**3.86**		0.0996		mg/Kg		02/25/25 08:42	02/25/25 15:01	50
m-Xylene & p-Xylene	**8.06**		0.199		mg/Kg		02/25/25 08:42	02/25/25 15:01	50
o-Xylene	**2.81**		0.0996		mg/Kg		02/25/25 08:42	02/25/25 15:01	50
Xylenes, Total	**10.9**		0.199		mg/Kg		02/25/25 08:42	02/25/25 15:01	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*159*	*S1+*	*70 - 130*	*02/25/25 08:42*	*02/25/25 15:01*	*50*

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Client Sample ID: SS03

Lab Sample ID: 890-7710-2
Matrix: Solid
Date Collected: 02/24/25 11:20
Date Received: 02/24/25 14:05
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*02/25/25 08:42*	*02/25/25 15:01*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**17.3**		0.199		mg/Kg			02/25/25 15:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**12700**		999		mg/Kg			02/25/25 11:09	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	<999	U	999		mg/Kg		02/24/25 17:19	02/25/25 11:09	20
Diesel Range Organics (Over C10-C28)	**12700**		999		mg/Kg		02/24/25 17:19	02/25/25 11:09	20
Oil Range Organics (Over C28-C36)	<999	U	999		mg/Kg		02/24/25 17:19	02/25/25 11:09	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*144*	*S1+*	*70 - 130*	*02/24/25 17:19*	*02/25/25 11:09*	*20*
o-Terphenyl	*402*	*S1+*	*70 - 130*	*02/24/25 17:19*	*02/25/25 11:09*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3110**		49.6		mg/Kg			02/26/25 03:52	5

Client Sample ID: SS04

Lab Sample ID: 890-7710-3
Matrix: Solid
Date Collected: 02/24/25 11:25
Date Received: 02/24/25 14:05
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.23**		0.100		mg/Kg		02/25/25 08:42	02/25/25 15:22	50
Toluene	**57.2**		1.00		mg/Kg		02/25/25 08:42	02/25/25 18:18	500
Ethylbenzene	**50.3**		1.00		mg/Kg		02/25/25 08:42	02/25/25 18:18	500
m-Xylene & p-Xylene	**87.6**		2.01		mg/Kg		02/25/25 08:42	02/25/25 18:18	500
o-Xylene	**43.9**		1.00		mg/Kg		02/25/25 08:42	02/25/25 18:18	500
Xylenes, Total	**132**		2.01		mg/Kg		02/25/25 08:42	02/25/25 18:18	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*471*	*S1+*	*70 - 130*	*02/25/25 08:42*	*02/25/25 15:22*	*50*
4-Bromofluorobenzene (Surr)	*182*	*S1+*	*70 - 130*	*02/25/25 08:42*	*02/25/25 18:18*	*500*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*02/25/25 08:42*	*02/25/25 15:22*	*50*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/25/25 08:42*	*02/25/25 18:18*	*500*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**246**		2.01		mg/Kg			02/25/25 18:18	1

Client Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Client Sample ID: SS04

Date Collected: 02/24/25 11:25
Date Received: 02/24/25 14:05
Sample Depth: 0.5

Lab Sample ID: 890-7710-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	10700		995		mg/Kg			02/25/25 11:24	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	3610		995		mg/Kg		02/24/25 17:19	02/25/25 11:24	20
Diesel Range Organics (Over C10-C28)	7040		995		mg/Kg		02/24/25 17:19	02/25/25 11:24	20
Oil Range Organics (Over C28-C36)	<995	U	995		mg/Kg		02/24/25 17:19	02/25/25 11:24	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*198*	*S1+*	*70 - 130*	*02/24/25 17:19*	*02/25/25 11:24*	*20*
o-Terphenyl	*245*	*S1+*	*70 - 130*	*02/24/25 17:19*	*02/25/25 11:24*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	992		9.96		mg/Kg			02/25/25 13:40	1

Surrogate Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7710-1	SS02	321 S1+	116
890-7710-2	SS03	159 S1+	131 S1+
890-7710-3	SS04	471 S1+	109
890-7710-3	SS04	182 S1+	113
890-7711-A-8-C MS	Matrix Spike	105	106
890-7711-A-8-D MSD	Matrix Spike Duplicate	99	111
LCS 880-103623/1-A	Lab Control Sample	96	108
LCSD 880-103623/2-A	Lab Control Sample Dup	98	105
MB 880-103623/5-A	Method Blank	100	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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7710-1	SS02	183 S1+	320 S1+
890-7710-2	SS03	144 S1+	402 S1+
890-7710-3	SS04	198 S1+	245 S1+
890-7711-A-1-E MS	Matrix Spike	80	68 S1-
890-7711-A-1-F MSD	Matrix Spike Duplicate	78	67 S1-
LCS 880-103580/2-A	Lab Control Sample	78	66 S1-
LCSD 880-103580/3-A	Lab Control Sample Dup	79	68 S1-
MB 880-103580/1-A	Method Blank	82	73

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-103623/5-A
Matrix: Solid
Analysis Batch: 103618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103623

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/25/25 08:42	02/25/25 11:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/25/25 08:42	02/25/25 11:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/25/25 08:42	02/25/25 11:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/25/25 08:42	02/25/25 11:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/25/25 08:42	02/25/25 11:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/25/25 08:42	02/25/25 11:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/25/25 08:42*	*02/25/25 11:56*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/25/25 08:42*	*02/25/25 11:56*	*1*

Lab Sample ID: LCS 880-103623/1-A
Matrix: Solid
Analysis Batch: 103618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103623

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1019		mg/Kg		102	70 - 130		
Toluene			0.100	0.08903		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.09605		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.2009		mg/Kg		100	70 - 130		
o-Xylene			0.100	0.09985		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-103623/2-A
Matrix: Solid
Analysis Batch: 103618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103623

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1010		mg/Kg		101	70 - 130	1	35
Toluene			0.100	0.08904		mg/Kg		89	70 - 130	0	35
Ethylbenzene			0.100	0.09619		mg/Kg		96	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.2010		mg/Kg		100	70 - 130	0	35
o-Xylene			0.100	0.1007		mg/Kg		101	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-7711-A-8-C MS
Matrix: Solid
Analysis Batch: 103618

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 103623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.08860		mg/Kg		89	70 - 130		
Toluene	<0.00200	U	0.100	0.07681		mg/Kg		77	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

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

Lab Sample ID: 890-7711-A-8-C MS
Matrix: Solid
Analysis Batch: 103618

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 103623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.07941		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1646		mg/Kg		82	70 - 130
o-Xylene	<0.00200	U	0.100	0.08504		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 890-7711-A-8-D MSD
Matrix: Solid
Analysis Batch: 103618

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 103623

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	0.1083		mg/Kg		108	70 - 130	20	35
Toluene	<0.00200	U	0.100	0.09490		mg/Kg		95	70 - 130	21	35
Ethylbenzene	<0.00200	U	0.100	0.09906		mg/Kg		99	70 - 130	22	35
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2008		mg/Kg		100	70 - 130	20	35
o-Xylene	<0.00200	U	0.100	0.1002		mg/Kg		100	70 - 130	16	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

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

Lab Sample ID: MB 880-103580/1-A
Matrix: Solid
Analysis Batch: 103628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103580

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		02/24/25 17:18	02/25/25 01:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/24/25 17:18	02/25/25 01:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/25 17:18	02/25/25 01:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*02/24/25 17:18*	*02/25/25 01:19*	*1*
o-Terphenyl	*73*		*70 - 130*	*02/24/25 17:18*	*02/25/25 01:19*	*1*

Lab Sample ID: LCS 880-103580/2-A
Matrix: Solid
Analysis Batch: 103628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103580

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	742.9		mg/Kg		74	70 - 130
Diesel Range Organics (Over C10-C28)			1000	702.1		mg/Kg		70	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

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

Lab Sample ID: LCS 880-103580/2-A
Matrix: Solid
Analysis Batch: 103628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103580

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	66	S1-	70 - 130

Lab Sample ID: LCSD 880-103580/3-A
Matrix: Solid
Analysis Batch: 103628

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103580

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	730.9		mg/Kg		73	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	698.9		mg/Kg		70	70 - 130	0	20

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

Lab Sample ID: 890-7711-A-1-E MS
Matrix: Solid
Analysis Batch: 103628

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 103580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	998	690.6	F1	mg/Kg		69	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	751.0		mg/Kg		72	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	80		70 - 130
o-Terphenyl	68	S1-	70 - 130

Lab Sample ID: 890-7711-A-1-F MSD
Matrix: Solid
Analysis Batch: 103628

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 103580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	998	586.5	F1	mg/Kg		59	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	717.1	F1	mg/Kg		69	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	67	S1-	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-103610/1-A
Matrix: Solid
Analysis Batch: 103625

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			02/25/25 12:02	1

Lab Sample ID: LCS 880-103610/2-A
Matrix: Solid
Analysis Batch: 103625

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	246.3		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-103610/3-A
Matrix: Solid
Analysis Batch: 103625

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	246.6		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 890-7711-A-1-C MS
Matrix: Solid
Analysis Batch: 103625

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	426		249	668.6		mg/Kg		97	90 - 110		

Lab Sample ID: 890-7711-A-1-D MSD
Matrix: Solid
Analysis Batch: 103625

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	426		249	669.2		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-103636/1-A
Matrix: Solid
Analysis Batch: 103638

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			02/26/25 00:33	1

Lab Sample ID: LCS 880-103636/2-A
Matrix: Solid
Analysis Batch: 103638

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	256.1		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-103636/3-A
Matrix: Solid
Analysis Batch: 103638

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.8		mg/Kg		105	90 - 110	2	20

QC Sample Results

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-54822-A-2-B MS
Matrix: Solid
Analysis Batch: 103638

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	559		251	808.9		mg/Kg		100	90 - 110

Lab Sample ID: 880-54822-A-2-C MSD
Matrix: Solid
Analysis Batch: 103638

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	559		251	797.9		mg/Kg		95	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

GC VOA

Analysis Batch: 103618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-1	SS02	Total/NA	Solid	8021B	103623
890-7710-2	SS03	Total/NA	Solid	8021B	103623
890-7710-3	SS04	Total/NA	Solid	8021B	103623
890-7710-3	SS04	Total/NA	Solid	8021B	103623
MB 880-103623/5-A	Method Blank	Total/NA	Solid	8021B	103623
LCS 880-103623/1-A	Lab Control Sample	Total/NA	Solid	8021B	103623
LCSD 880-103623/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	103623
890-7711-A-8-C MS	Matrix Spike	Total/NA	Solid	8021B	103623
890-7711-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	103623

Prep Batch: 103623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-1	SS02	Total/NA	Solid	5035	
890-7710-2	SS03	Total/NA	Solid	5035	
890-7710-3	SS04	Total/NA	Solid	5035	
MB 880-103623/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-103623/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-103623/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7711-A-8-C MS	Matrix Spike	Total/NA	Solid	5035	
890-7711-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 103671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-1	SS02	Total/NA	Solid	Total BTEX	
890-7710-2	SS03	Total/NA	Solid	Total BTEX	
890-7710-3	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 103580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-1	SS02	Total/NA	Solid	8015NM Prep	
890-7710-2	SS03	Total/NA	Solid	8015NM Prep	
890-7710-3	SS04	Total/NA	Solid	8015NM Prep	
MB 880-103580/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-103580/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-103580/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7711-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-7711-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 103628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-1	SS02	Total/NA	Solid	8015B NM	103580
890-7710-2	SS03	Total/NA	Solid	8015B NM	103580
890-7710-3	SS04	Total/NA	Solid	8015B NM	103580
MB 880-103580/1-A	Method Blank	Total/NA	Solid	8015B NM	103580
LCS 880-103580/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	103580
LCSD 880-103580/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	103580
890-7711-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	103580
890-7711-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	103580

QC Association Summary

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

GC Semi VOA

Analysis Batch: 103668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-1	SS02	Total/NA	Solid	8015 NM	
890-7710-2	SS03	Total/NA	Solid	8015 NM	
890-7710-3	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 103610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-3	SS04	Soluble	Solid	DI Leach	
MB 880-103610/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-103610/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-103610/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7711-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-7711-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 103625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-3	SS04	Soluble	Solid	300.0	103610
MB 880-103610/1-A	Method Blank	Soluble	Solid	300.0	103610
LCS 880-103610/2-A	Lab Control Sample	Soluble	Solid	300.0	103610
LCSD 880-103610/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	103610
890-7711-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	103610
890-7711-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	103610

Leach Batch: 103636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-1	SS02	Soluble	Solid	DI Leach	
890-7710-2	SS03	Soluble	Solid	DI Leach	
MB 880-103636/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-103636/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-103636/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-54822-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-54822-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 103638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7710-1	SS02	Soluble	Solid	300.0	103636
890-7710-2	SS03	Soluble	Solid	300.0	103636
MB 880-103636/1-A	Method Blank	Soluble	Solid	300.0	103636
LCS 880-103636/2-A	Lab Control Sample	Soluble	Solid	300.0	103636
LCSD 880-103636/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	103636
880-54822-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	103636
880-54822-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	103636

Lab Chronicle

Client: Ensolum
Project/Site: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Client Sample ID: SS02

Date Collected: 02/24/25 11:15
Date Received: 02/24/25 14:05

Lab Sample ID: 890-7710-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	103623	02/25/25 08:42	AA	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	103618	02/25/25 14:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			103671	02/25/25 14:41	AJ	EET MID
Total/NA	Analysis	8015 NM		1			103668	02/25/25 10:54	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	103580	02/24/25 17:19	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	103628	02/25/25 10:54	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	103636	02/25/25 10:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	103638	02/26/25 03:45	CH	EET MID

Client Sample ID: SS03

Date Collected: 02/24/25 11:20
Date Received: 02/24/25 14:05

Lab Sample ID: 890-7710-2
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	103623	02/25/25 08:42	AA	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	103618	02/25/25 15:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			103671	02/25/25 15:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			103668	02/25/25 11:09	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	103580	02/24/25 17:19	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	103628	02/25/25 11:09	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	103636	02/25/25 10:11	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	103638	02/26/25 03:52	CH	EET MID

Client Sample ID: SS04

Date Collected: 02/24/25 11:25
Date Received: 02/24/25 14:05

Lab Sample ID: 890-7710-3
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			4.98 g	5 mL	103623	02/25/25 08:42	AA	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	103618	02/25/25 15:22	MNR	EET MID
Total/NA	Prep	5035			4.98 g	5 mL	103623	02/25/25 08:42	AA	EET MID
Total/NA	Analysis	8021B		500	5 mL	5 mL	103618	02/25/25 18:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			103671	02/25/25 18:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			103668	02/25/25 11:24	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	103580	02/24/25 17:19	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	103628	02/25/25 11:24	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	103610	02/25/25 07:54	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	103625	02/25/25 13:40	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: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

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	06-30-25

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: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

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: Warren Unit Battery #1 SWD

Job ID: 890-7710-1
SDG: 07A1988155

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7710-1	SS02	Solid	02/24/25 11:15	02/24/25 14:05	0.5
890-7710-2	SS03	Solid	02/24/25 11:20	02/24/25 14:05	0.5
890-7710-3	SS04	Solid	02/24/25 11:25	02/24/25 14:05	0.5

eurofins | Environment Testing Xenco

Chain of Custody

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

890-7710 Chain of Custody

Page 1 of 1

Project Manager:	Devin Hencmann	Bill to: (if different)	Billy Ginn
Company Name:	Ensolum	Company Name:	Hilcorp
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	Dhencmann@ensolum.com

Work Order Comments

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

Project Name:	Warren Unit Battery #1 & SWD	Turn Around	☐ Routine ☑ Rush
Project Number:	07A1988155	Due Date:	48hr
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TNmeo7
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	+0.8
Total Containers:		Corrected Temperature:	+0.6

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 3000.0)	Parameters: TPH (8015)	Parameters: BTEX (8021)
SS02	S	2-24-25	1115	0.5	G	1		/	/	/
SS03	S	↓	1120	0.5	G	1		/	/	/
SS04	S	↓	1125	0.5	G	2		/	/	/

CW

Preservative Codes

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

Sample Comments

Incident ID:

Cost Center:

AFE:

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		14:05	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7710-1
SDG Number: 07A1988155

Login Number: 7710
List Number: 1
Creator: Lopez, Abraham

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: 890-7710-1
SDG Number: 07A1988155

Login Number: 7710
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 02/25/25 07:44 AM

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

ENSOLUM

APPENDIX D

Site Photographs

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

Initial release facing North on pasture/pad

Initial release facing South on pasture/pad

ENSOLUM

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

Initial release facing South within tank battery

Initial release facing North within tank battery

ENSOLUM

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

View of release flow path facing South

Initial release facing North around production equipment

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

View of release flow path facing North

View of initial sample SS01A

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Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

View facing Southwest of excavation activities around surface lines.

View facing Southwest of excavation activities

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Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

View facing Northwest of excavation activities

View facing East of shoveled tank battery

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

View facing Southwest of ongoing excavation actvities

View facing Southeast of excavation extent in pasture/pad

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Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

View facing North of shoveled extent around production equipment

View facing Northwest of shoveling around production equipment.

ENSOLUM

Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

View facing North/Northwest of shoveled tank battery

View facing Northwest of excavation on pad/pasture.

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Photographic Log
Hilcorp Energy Company
Warren Unit Battery #1 SWD
NMOCD Incident Number: nAPP2500352359

View facing South of shoveled area around production equipment.

View facing Southwest of final excavation.

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

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 535544
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2500352359**
Incident Name	**NAPP2500352359 WARREN UNIT BATTERY #1 & SWD @ H-33-20S-38E**
Incident Type	**Oil Release**
Incident Status	**Deferral Request Received**

Location of Release Source *Please answer all the questions in this group.*	
Site Name	WARREN UNIT BATTERY #1 & SWD
Date Release Discovered	01/03/2025
Surface Owner	Private

Incident Details *Please answer all the questions in this group.*	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*	
Crude Oil Released (bbls) Details	Cause: Overflow - Tank, Pit, Etc. | Tank (Any) | Crude Oil | Released: 800 BBL | Recovered: 720 BBL | Lost: 80 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 535544
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	NA

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 12/16/2025

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 535544
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission		Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Have the lateral and vertical extents of contamination been fully delineated		Yes
Was this release entirely contained within a lined containment area		No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride	(EPA 300.0 or SM4500 Cl B)	3110
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	37400
GRO+DRO	(EPA SW-846 Method 8015M)	37400
BTEX	(EPA SW-846 Method 8021B or 8260B)	488
Benzene	(EPA SW-846 Method 8021B or 8260B)	35.6
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence		01/07/2025
On what date will (or did) the final sampling or liner inspection occur		10/10/2025
On what date will (or was) the remediation complete(d)		10/10/2025
What is the estimated surface area (in square feet) that will be reclaimed		4150
What is the estimated volume (in cubic yards) that will be reclaimed		525
What is the estimated surface area (in square feet) that will be remediated		4150
What is the estimated volume (in cubic yards) that will be remediated		525
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.		

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 535544
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	fKJ1600527371 SUNDANCE SERVICES, INC
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 12/16/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 535544
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	active production equipment, flowlines, process piping, containment area, production tanks, and production equipment
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	4527
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	1595
Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	
Enter the facility ID (f#) on which this deferral should be granted	*Not answered.*
Enter the well API (30-) on which this deferral should be granted	30-025-32996 WARREN UNIT BLINEBRY TUBB WF #208
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 12/16/2025

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Oil Conservation Division
1220 S. St Francis Dr.
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QUESTIONS (continued)

Operator:	OGRID:
HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	372171
	Action Number: 535544
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**533305**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**12/12/2025**
What was the (estimated) number of samples that were to be gathered	**10**
What was the sampling surface area in square feet	**1200**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 535544
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Deferral is approved. Remediation Due date will be left open until the site has been plugged and abandoned or a major facility deconstruction takes place.	2/18/2026