



December 9, 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: Reclamation Report
Hat Mesa 32 State 2
Incident Number nAPP2316046257
API: 30-025-34819
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Reclamation Report* for the Hat Mesa 32 State 2 (Site). This *Reclamation Report* documents the Site history, reclamation activities completed to date, and proposes a vegetation monitoring plan.

BACKGROUND

The Site is located in Unit C, Section 32, Township 20 South, Range 33 East, in Lea County, New Mexico (32.53601°, -103.68800°) and is associated with oil and gas exploration and production operations on State Trust Land (STL) managed by the New Mexico State Land Office (SLO) under Lease Number V016180001.

On May 27, 2023, corrosion on a steel flowline resulted in the release of 1.9 barrels (bbls) of crude oil and 15.40 bbls produced water onto the surface of pasture area. A vacuum truck was dispatched to the site to recover free standing fluids, approximately 3.0 bbls of released fluid were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on June 9, 2023, and the release was assigned Incident Number nAPP2316046257.

Delineation and excavation of impacted soil was completed at the Site between June 19, 2023 and November 21, 2023. Based on the delineation and excavation soil sample analytical results, a *Closure Request* was submitted to the NMOCD on June 10, 2024. The NMOCD approved the *Closure Request* on August 1, 2024. Additional details regarding the release, Site Characterization, delineation and excavation activities, and soil sample analytical results can be referenced in the approved *Closure Request* attached as an appendix in this report. Remediation of the release was completed in accordance with Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC).

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SLO CULTURAL RESOURCES AND BIOLOGICAL REVIEW

Cultural Properties Protection

A portion of the release was identified in the pasture, as a result, the release location was assessed for determination of whether the release encroached into undisturbed areas to comply with the Cultural Properties Protection Rule (CPP) prior to disturbing the surface with mechanical equipment. An Archaeological Records Management System (ARMS) review was performed for the release extent prior to excavation. No cultural resources were identified within and/or around the release extent requiring remediation efforts. An approved CPP Rule cover sheet showing the area was previously surveyed is attached in the previous Closure Request in the appendix.

Biological Review

Ensolum personnel conducted a desktop review to establish if the Site is within an area of possible threatened, endangered, and sensitive wildlife and plant species, environmentally sensitive areas, surface waters, and sensitive soils.

- A review of the U.S. Fish and Wildlife Services Information for Planning and Consultation (IPaC) resources indicated there are no critical habitats at the Site. Potential habitats for Texas Hornshell Clam, Lesser Prairie-chicken, Northern Aplomado Falcon and Monarch Butterfly were identified as potentially being present in nearby areas, but none were observed at the Site. A review of the Bureau of Land Management (BLM) NM Plant Wildlife Habitat maps indicated that there is potential Scheer's beehive cactus located near the Site, but none were observed at the Site.
- The Site is located within an area of possible range of the Lesser Prairie Chicken habitat based on a review of SLO Candidate Conservation Agreement with Assurances (CCAA) map.
 - From March 1st through June 15th, no remediation activities occurred between the hours of 3:00 am to 9:00 am to protect any Lesser Prairie Chickens within the area.
- No environmentally sensitive receptors were located near the Site, as determined by the Site Characterization.
- The Natural Resources Conservation Service (NRCS) Web Soil Survey classifies the soil type at the Site as Kimbrough gravelly loam. The Kimbrough gravelly loam is not considered a sensitive soil per the SLO guidelines.

RECLAMATION ACTIVITIES

The excavation area in the pasture measured approximately 7,141 square feet. A total of approximately 930 cubic yards of impacted soil were removed during the excavation activities. Upon completion of excavation activities and receipt of final laboratory analytical results, the excavation was backfilled with locally procured topsoil and the disturbed area was restored to its original condition. Following backfill activities, the disturbed area was graded and contoured to match the surrounding topography. The release extent and reclamation area are shown on the attached Figure 1.

One representative 5-point composite sample (BF01) was collected from the topsoil backfill material on August 13, 2025. The backfill soil sample was transported under strict chain-of-custody procedures to Cardinal Laboratories in Hobbs, New Mexico, for analysis of the following constituents of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; total petroleum hydrocarbons (TPH)—gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method 4500.

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Laboratory analytical results for the backfill soil sample confirmed compliance with NMOCD requirements for the reclaimed area to contain non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 milligrams per kilogram (mg/kg) and TPH concentrations less than 100 mg/kg. The laboratory analytical results are summarized in the attached Table 1, and the complete laboratory analytical report is included as Appendix A. Photographic documentation of the current Site condition is included in Appendix B.

The pasture area will be seeded during the Spring of 2026, when temperatures and precipitation are more conducive to vegetation growth. The Site will be seeded with the below SLO seed mix for sandy loam at the rate specified in pounds of pure live seed (PLS) per acre.

Common Name	Variety	PLS/Acre
Galleta grass	Viva, VNS, So.	2.5
Little bluestem	Cimarron, Pastura	2.5
Blue grama	Hachita, Lovington	2.0
Sideoats grama	Vaughn, El Reno	2.0
Sand dropseed	VNS, Southern	1.0

The seed mix will be applied via drill seeding or broadcast seeding. If broadcast seeding is selected, the PLS/acre will be doubled, and the seed will be raked in by chaining or dragging the Site.

VEGETATION MONITORING

The Site will be monitored for vegetation growth to ensure that reclamation activities were successful. Focus for this phase will be to prevent erosion and Site degradation, and to monitor for and treat invasive and noxious weed species.

- Annual inspections will take place at the location to assess revegetation progress until vegetation is consistent with local natural vegetation density.
- If necessary, an additional application of the SLO seed mix will be applied.
- Noxious and invasive weeds will be identified and treated by licensed contracted herbicide applicator or mechanically removed.

A *Revegetation Report* will be submitted to the NMOCD and SLO once vegetation growth in the reclaimed pasture area has uniform vegetative cover that reflects a life-form ratio of plus or minus 50 percent (%) of pre-disturbance levels and a total percent plant cover of at least 70% of pre-disturbance levels, excluding noxious weeds, per NMAC 19.15.29.13 D.(3).

RECLAMATION APPROVAL REQUEST

The approved June 10, 2024, *Closure Request* is included in Appendix C. Based on the reclamation activities completed to date and proposed vegetation monitoring plan described above, XTO respectfully requests approval of this *Reclamation Report* and a status update to *Reclamation Report Approved, Pending submission of Re-Vegetation Report* for Incident nAPP2316046257.

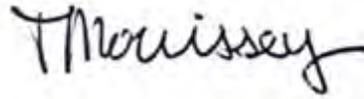
XTO Energy, Inc
Reclamation Report
Hat Mesa 32 State 2

If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely,
Ensolum, LLC



Tracy Hillard
Project Engineer



Tacoma Morrissey, PG (Licensed in TX)
Associate Principal

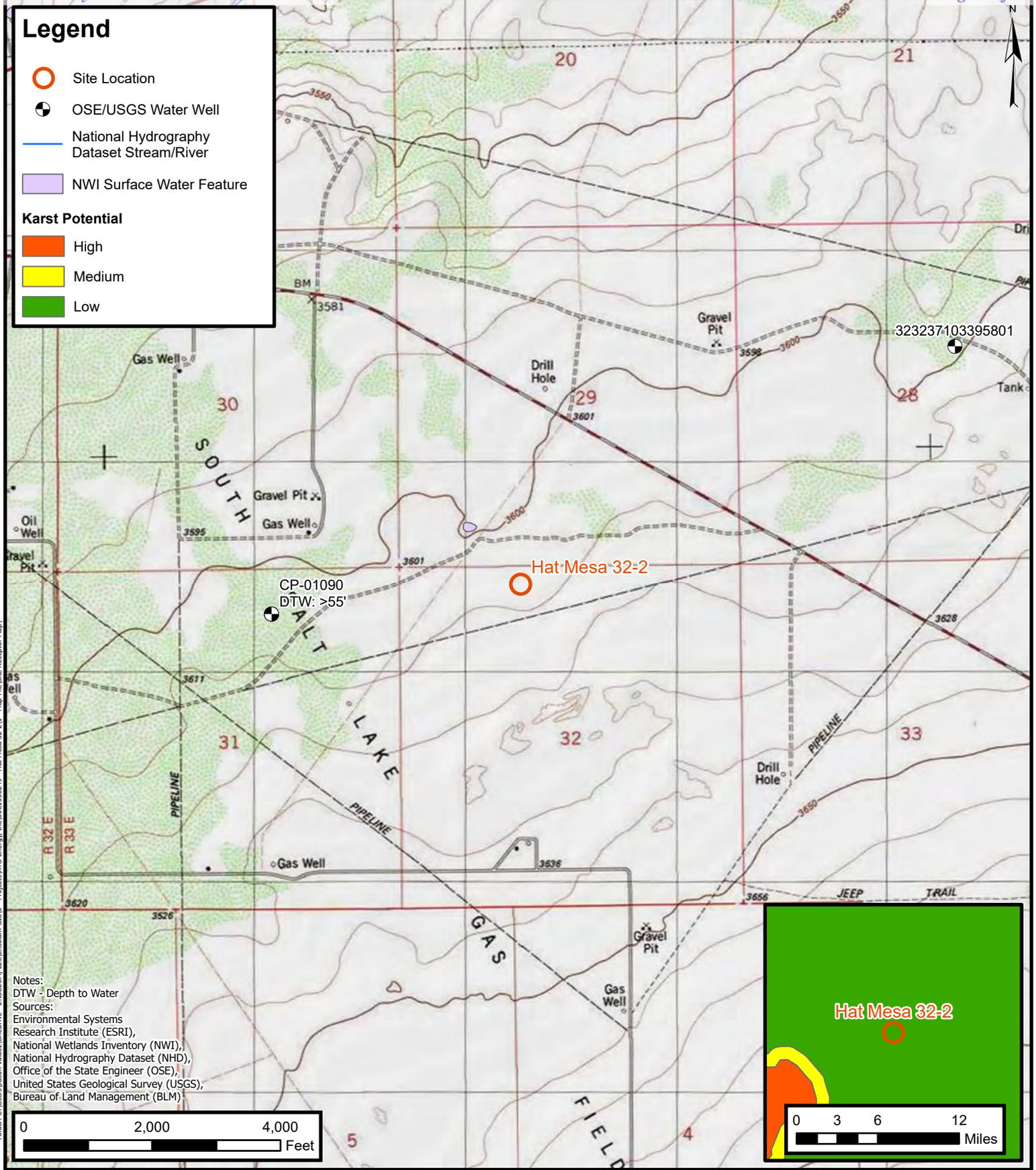
cc: Robert Woodall, XTO
Richard Kotzur, XTO
New Mexico State Land Office

Appendices:

Figure 1 Site Receptor Map
Figure 2 Delineation Soil Sample Locations
Figure 3 Excavation Soil Sample Locations
Figure 4 Proposed Area of Reclamation
Table 1 Soil Sample Analytical Results
Appendix A Laboratory Analytical Report & Chain of Custody Documentation
Appendix B Photographic Log
Appendix C June 10, 2024, *Closure Request*



FIGURES



Folder: C:\Users\Justin Velez\OneDrive - ENSOLUM, LLC\Ensolium GIS\0 - Projects\XTO Energy, Inc\03\1598249 - Hat Mesa 32-2\1 - Map File\Site Receptor Map



Site Receptor Map
 XTO Energy Inc
 Hat Mesa 32 State 2
 Incident Number: nAPP2316046257
 Unit C, Sec 32, T20S, R33E
 Lea County, New Mexico

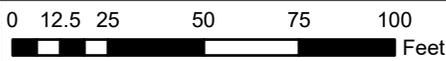
FIGURE
1

Legend

- Delineation Soil Sample in Compliance with NMOCD Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Closure Criteria
- Release Extent



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable closure criteria.
 Grey text indicate soil sample was removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)



Delineation Soil Sample Locations

XTO Energy, Inc
 Hat Mesa 32 State 2
 Incident Number: nAPP2316046257
 Unit C, Sec 32, T20S, R33E
 Lea County, New Mexico

FIGURE

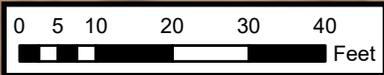
2

Legend

- Excavation Floor Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Sample in Compliance with Closure Criteria
- ▲ Removed Sidewall Sample
- Excavation Extent



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable Closure Criteria
 Grey text indicate soil sample was removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)



Excavation Soil Sample Locations

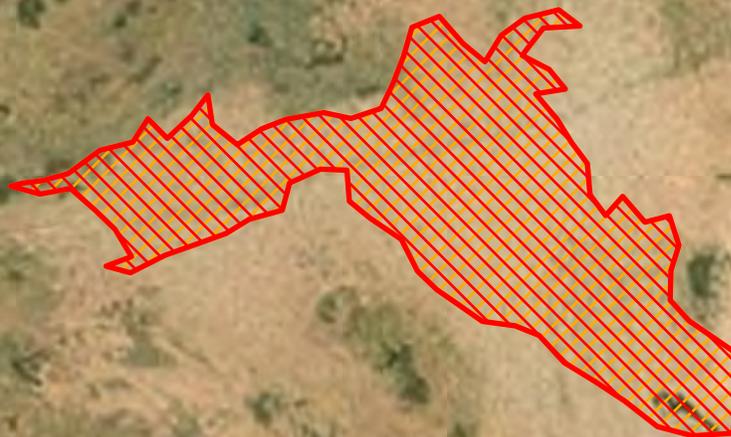
XTO Energy, Inc
 Hat Mesa 32 State 2
 Incident Number: nAPP2316046257
 Unit C, Sec 32, T20S, R33E
 Lea County, New Mexico

FIGURE

3

Legend

-  Proposed Area of Reclamation
-  Release Extent



Source:
Environmental Systems Research Institute (ESRI)



Proposed Area of Reclamation

XTO Energy, Inc
 Hat Mesa 32 State 2
 Incident Number: nAPP2316046257
 Unit C, Sec 32, T20S, R33E
 Lea County, New Mexico

FIGURE
4



TABLES



**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Hat Mesa 32 State 2
XTO Energy, Inc
Lea County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCDC Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Delineation Soil Samples										
SS01	06/19/2023	0.5	<0.0990	1.00	371	2,280	448	5,450	3,100	4,210
BH01	07/14/2023	2	<0.00198	<0.00397	<49.5	189	<49.5	189	189	6,930
SS02	06/19/2023	0.5	<0.00201	<0.00402	<50.0	565	80.0	565	645	4,950
BH02	07/14/2023	1.5	<0.00198	<0.00396	<49.9	952	<49.9	952	952	17,400
SS03	06/19/2023	0.5	<0.00200	0.0424	194	1,620	332	1,810	2,150	6,560
BH03	07/14/2023	1	<0.00200	<0.00399	<50.2	79.6	<50.2	79.6	79.6	931
SS04	06/19/2023	0.5	<0.0996	2.70	2,120	13,800	2,860	15,900	18,800	451
BH04	07/14/2023	1	<0.00200	<0.00400	<50.3	2,720	<50.3	2,720	2,720	95
SS05	06/19/2023	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	47.1
SS06	06/19/2023	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	31.7
SS07	06/19/2023	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	44.7
SS08	06/19/2023	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	46.4
Confirmation Soil Samples										
FS01	11/01/2023	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	101
FS02	11/01/2023	4	<0.00200	<0.00401	<49.6	<49.6	<49.6	<49.6	<49.6	93.5
FS03	11/01/2023	4	<0.00199	<0.00398	<49.7	67.6	<49.7	67.6	67.6	115
FS04	11/01/2023	4	<0.00199	<0.00398	<49.9	110	<49.9	110	110	131
FS04A	11/21/2023	5	<0.00201	<0.00402	<49.6	<49.6	<49.6	<49.6	<49.6	7.12
FS05	11/01/2023	4	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	109
FS06	11/01/2023	4	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	67.5
FS07	11/01/2023	4	<0.00200	<0.00401	<50.3	<50.3	<50.3	<50.3	<50.3	143
FS08	11/01/2023	4	<0.00199	<0.00398	<50.5	51.1	<50.5	51.1	51.1	96.3
FS09	11/02/2023	4	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	106
FS10	11/02/2023	4	<0.00200	<0.00399	<50.5	<50.5	<50.5	<50.5	<50.5	122
FS11	11/02/2023	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	108
FS12	11/02/2023	3	<0.00200	<0.00400	<49.9	91.5	<49.9	91.5	91.5	105
FS13	11/02/2023	3	<0.00200	<0.00399	<50.2	70.8	<50.2	70.8	70.8	132
FS14	11/02/2023	3	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	187
FS15	11/02/2023	3	<0.00199	<0.00398	<50.5	56.3	<50.5	56.3	56.3	236
FS16	11/02/2023	3	<0.00199	<0.00398	<49.7	231	<49.7	231	231	129
FS16A	11/21/2023	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	38.0



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Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
FS17	11/02/2023	3	<0.00198	<0.00396	<49.7	187	<49.7	187	187	427
FS17A	11/21/2023	4	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	<50.1	6.85
FS18	11/02/2023	3	<0.00199	<0.00398	<50.4	114	<50.4	114	114	88.5
FS18A	11/21/2023	4	<0.00202	<0.00403	<50.4	<50.4	<50.4	<50.4	<50.4	10.9
FS19	11/02/2023	3	<0.00200	<0.00399	<49.8	104	<49.8	104	104	82.4
FS19A	11/21/2023	4	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	<50.5	35.3
FS20	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	412
FS21	11/03/2023	3.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	36.1
FS22	11/03/2023	3	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	70.2
FS23	11/03/2023	3	<0.00200	<0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	71.2
FS24	11/03/2023	3	<0.00201	<0.00402	<50.5	<50.5	<50.5	<50.5	<50.5	439
FS25	11/03/2023	3	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	<50.1	60.1
FS26	11/03/2023	3	<0.00200	<0.00401	<50.4	<50.4	<50.4	<50.4	<50.4	136
FS27	11/03/2023	3	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	138
FS28	11/03/2023	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	133
FS29	11/03/2023	3	<0.00200	<0.00399	<50.2	<50.2	<50.2	<50.2	<50.2	259
FS30	11/03/2023	3	<0.00201	<0.00402	<50.4	<50.4	<50.4	<50.4	<50.4	362
FS31	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	68.5
FS32	11/03/2023	3	<0.00199	<0.00398	<49.5	<49.5	<49.5	<49.5	<49.5	61.9
FS33	11/03/2023	3	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	92.4
FS34	11/03/2023	3	<0.00200	<0.00399	<50.1	<50.1	<50.1	<50.1	<50.1	202
FS35	11/03/2023	3	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	<50.4	213
FS36	11/03/2023	3	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	135
FS37	11/03/2023	3	<0.00198	<0.00396	<49.5	<49.5	<49.5	<49.5	<49.5	97.6
FS38	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	371
SW01	11/01/2023	0 - 4	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	<50.4	84.8
SW02	11/01/2023	0 - 4	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	90.9
SW02A	11/21/2023	0 - 5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	19.4
SW03	11/01/2023	0 - 4	<0.00202	<0.00403	<49.7	76.3	<49.7	76.3	76.3	109
SW04	11/01/2023	0 - 4	<0.00199	<0.00398	<50.3	88.9	<50.3	88.9	88.9	131
SW05	11/02/2023	0 - 3	<0.00200	<0.00401	<49.6	149	<49.6	149	149	77.0
SW06	11/03/2023	0 - 3.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	80.2



**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Hat Mesa 32 State 2
XTO Energy, Inc
Lea County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
SW07	11/03/2023	0 - 3	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	80.6
SW08	11/03/2023	0 - 3	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	102
SW09	11/03/2023	0 - 3	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	71.5
SW10	11/03/2023	0 - 3	<0.00198	<0.00397	<50.3	<50.3	<50.3	<50.3	<50.3	101
SW11	11/21/2023	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	17.7
Backfill Soil Sample										
BF01	08/13/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

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

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities or area was resampled



Appendix A

Laboratory Analytical Report & Chain of Custody Documentation



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

August 20, 2025

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: HAT MESA 32-2

Enclosed are the results of analyses for samples received by the laboratory on 08/14/25 13:50.

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 accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
 TRACY HILLARD
 3122 NATIONAL PARKS HWY
 CARLSBAD NM, 88220
 Fax To:

Received:	08/14/2025	Sampling Date:	08/13/2025
Reported:	08/20/2025	Sampling Type:	Soil
Project Name:	HAT MESA 32-2	Sampling Condition:	Cool & Intact
Project Number:	03C1558639	Sample Received By:	Shalyn Rodriguez
Project Location:	32.53601, -103.688		

Sample ID: BF 01 0.5 (H255040-01)

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	08/15/2025	ND	1.85	92.7	2.00	0.608	
Toluene*	<0.050	0.050	08/15/2025	ND	1.85	92.7	2.00	0.982	
Ethylbenzene*	<0.050	0.050	08/15/2025	ND	1.85	92.3	2.00	0.0226	
Total Xylenes*	<0.150	0.150	08/15/2025	ND	5.63	93.9	6.00	0.179	
Total BTEX	<0.300	0.300	08/15/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/15/2025	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	08/15/2025	ND	207	104	200	4.13	
DRO >C10-C28*	<10.0	10.0	08/15/2025	ND	196	97.8	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	08/15/2025	ND					

Surrogate: 1-Chlorooctane 85.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 78.7 % 40.6-153

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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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.
- 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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC Project Manager: TACY HILLARD Address: 3122 National Parks Hwy City: Carlsbad State: NM Zip: 88220 Phone #: 575.937.3906 Fax #: Project #: 03C1558639 Project Owner: XTO ENERGY, INC Project Name: Hart Mesa 32-2 Project Location: 32.53601, -105.688 Sampler Name: CHRIS MARGIT		P.O. #: Company: XTO ENERGY, INC. Attn: DALE WOODALL Address: 3104 E. QUEEN ST. City: Carlsbad State: NM Zip: 88220 Phone #: Fax #:	
FOR LAB USE ONLY Lab I.D.: HBSS040 Sample I.D.: BFO1 Sample Depth (feet): 0.5 Matrix: <input checked="" type="checkbox"/> SOIL <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER: Preserv: <input checked="" type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER: DATE: 8/13/25 TIME: 1108		BILL TO ANALYSIS REQUEST	
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 analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits, incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.		REMARKS: LAST CENTER: 1148851001 GFCM: 48605000 Turnaround Time: #140 Thermometer ID #44- Correction Factor: +0.3:	
Relinquished By: [Signature] Date: 8/14/25 Time: 1350		Received By: [Signature] Date: Time:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C: -0.5 Corrected Temp. °C: -0.3 Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Bacteria (only) Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

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



Appendix B
Photographic Log



Photographic Log

XTO Energy, Inc
Hat Mesa 32 State 2
nAPP2316046257



Photograph: 1 Date: 6/6/2024
Description: Backfilled excavation extent
View: Southeast

Photograph: 2 Date: 6/6/2024
Description: Backfilled excavation extent
View: Northwest



Photograph: 3 Date: 8/13/2025
Description: Current Site status
View: Northwest

Photograph: 4 Date: 8/13/2025
Description: Current Site status
View: Southwest



Appendix C

June 10, 2024, *Closure Request*



June 10, 2024

New Mexico Oil Conservation Division

1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Closure Request
Hat Mesa 32-2
Incident Number NAPP2316046257
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document excavation and soil sampling activities performed at the Hat Mesa 32-2 (Site). The purpose of excavation and soil sampling activities, conducted in accordance with an approved Remediation Work Plan (*Work Plan*), was to address impacts to soil resulting from a release of crude oil and produced water at the Site. XTO is submitting this *Closure Request*, describing excavation activities that have occurred and requesting no further remediation for Incident Number NAPP2316046257.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit C, Section 32, Township 20 South, Range 33 East, in Lea County, New Mexico (32.53601°, -103.68800°) and is associated with oil and gas exploration and production operations on state land managed by the New Mexico State Land Office (NMSLO). Site location is shown in Figure 1.

On May 27, 2023, corrosion on a steel flowline resulted in the release of 1.9 barrels (bbls) of crude oil and 15.40 bbls produced water onto the surface of pasture area. A vacuum truck was dispatched to the site to recover free standing fluids, approximately 3.0 bbls of released fluid were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on June 9, 2023. The release was assigned Incident Number NAPP2316046257.

Ensolum conducted Site assessment, delineation, and excavation activities and presented the results in the *Work Plan*. The *Work Plan* was submitted on November 22, 2023 and approved by the NMOCD on March 11, 2024. The *Work Plan* documented the horizontal and vertical delineation of soil impacts and described initial excavation to address those impacts. Based on the presence of residual TPH concentrations, XTO proposed further excavation to remove soil represented by failing confirmation floor soil samples FS04, FS16 through FS19, and sidewall soil sample SW05. The *Work Plan* is included in Appendix A.

XTO Energy, Inc
Hat Mesa 32-2
Closure Request

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The *Work Plan* detailed the Site characterization to assess the applicability of Table I, Closure Criteria for Soils Impacted by Release of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Based on the results of the Site Characterization detailed in the approved *Work Plan* the following Closure Criteria apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

EXCAVATION SOIL SAMPLING ACTIVITIES

As proposed in the approved *Work Plan*, Ensolum personnel were onsite between November 1, 2023 and November 21, 2023 to excavate remaining impacted soil by advancing the depth of the excavation near previously collected soil samples FS04 and FS16 through FS19. Additionally, the portion of the sidewall represented by SW05 was extended. Excavation activities were performed by use of heavy equipment. To direct excavation activities, soil was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Once field screening indicated impacted soil was adequately removed, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation extent. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing.

Confirmation soil samples FS04A and FS16A through FS19A were collected from the floor of the excavation at depths ranging from 4 feet to 5 feet bgs. Confirmation soil sample SW02A was collected near FS04 to account for an extended sidewall where the floor was deepened. Sidewall soil sample SW11 was collected from the extended excavation near previously collected sidewall sample SW05. The confirmation soil sample locations were mapped utilizing a GPS unit and are depicted on Figure 2 with previously collected soil samples. Photographic documentation of the final excavation extent is provided in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (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-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil samples delivered to the laboratory the same day they are collected may not have equilibrated to the 6 degrees Celsius required for shipment and long-term storage but are considered by the laboratory to have been received in acceptable condition.

The final excavation extent, including the previously excavated area, measured approximately 7,141 square feet in areal extent. A total of approximately 930 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and disposed of at the R360 Landfill Disposal Facility in Hobbs, New Mexico. Upon completion of excavation activities and receipt of final laboratory analytical results, the excavation was backfilled with locally procured topsoil and the area was restored

XTO Energy, Inc
 Hat Mesa 32-2
 Closure Request

to its original condition. Following backfill activities, the disturbed area was graded and contoured to match the surrounding topography.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the newly collected excavation samples indicated COC concentrations were compliant with the Closure Criteria. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix C.

RECLAMATION PLAN

Upon completion of excavation activities and receipt of final laboratory analytical results, the excavation was backfilled with locally procured topsoil. One representative 5-point composite sample will be collected from the backfill material to confirm compliance with the NMOCD requirement for the reclaimed area to contain non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and TPH concentrations less than 100 mg/kg. The backfill sample will be handled and analyzed following the same procedures as described above.

Following backfill activities, the disturbed area was contoured to match the surrounding topography and the surface was prepared for seeding. Upon confirmation that the excavation was backfilled with non-waste containing material, the disturbed pasture area will be seeded with a certified weed-free seed mix. The below NRCS recommended seed mix will be used to seed the Site at the rate specified in pounds of pure live seed (PLS) per acre. Seed species will include:

Species/Cultivar	PLS/Acre
Gramma, Blue (Hachita)	0.81
Bluestem, Little	0.67
Sand, Mesa, Giant Dropseed	0.05
Gramma, Sideoats	2.28
Wheatgrass, Western (Barton)	2.38

The seed mix will be applied via drill seeding or broadcast seeding. If broadcast seeding is selected, the PLS/acre will be doubled and the seed will be raked in by chaining or dragging the Site. Reclamation activities will be documented with photographs and will be timestamped with Global Positioning System (GPS) data in decimal degrees.

The Site will be monitored for vegetation growth to ensure that reclamation activities were successful. Focus for this phase will be to prevent erosion and site degradation, and to monitor for and treat invasive and noxious weed species.

- Erosion control of the newly reclaimed areas includes prompt revegetation and contouring of the surface to prevent concentrated surface water flow.
- Annual inspections will take place at the location to assess revegetation progress until vegetation is consistent with local natural vegetation density.
- If necessary, an additional application of the BLM seed mix will be applied.
- Noxious and invasive weeds will be identified and treated by licensed contracted herbicide applicator or mechanically removed.

A *Revegetation Report* will be submitted to the NMOCD once vegetation growth in the reclaimed pasture area has uniform vegetative cover that reflects a life-form ratio of plus or minus fifty percent of pre-

XTO Energy, Inc
 Hat Mesa 32-2
 Closure Request

disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds, per NMAC 19.15.29.13 D.(3).

CLOSURE REQUEST

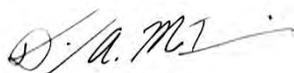
As outlined in the approved *Work Plan*, additional excavation activities were conducted at the Site to address the May 27, 2023 release of crude oil and produced water. Laboratory analytical results for excavation floor samples FS04 and FS16 through FS19 and excavation sidewall sample SW05 initially exceeded the Site Closure Criteria for TPH; additional soil was removed from these areas and excavation samples FS04A, FS16A through FS19A, SW02A, and SW11 were compliant.

Based on excavation and soil sampling activities completed during initial release response and subsequent excavation and sampling completed as outlined in the *Work Plan*, no further remediation is required. The excavation has been backfilled with material purchased locally and the Site has been recontoured to match pre-existing site conditions. Photographic documentation of the backfill is provided in Appendix B. All NMOCD correspondence is included in Appendix E.

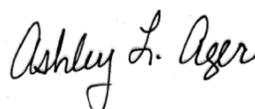
Excavation of soil has mitigated impacts exceeding the Closure Criteria at the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2316046257.

If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely,
Ensolum, LLC



David A. McInnis
 Project Geologist



Ashley L. Ager, M.S., P.G.
 Principal

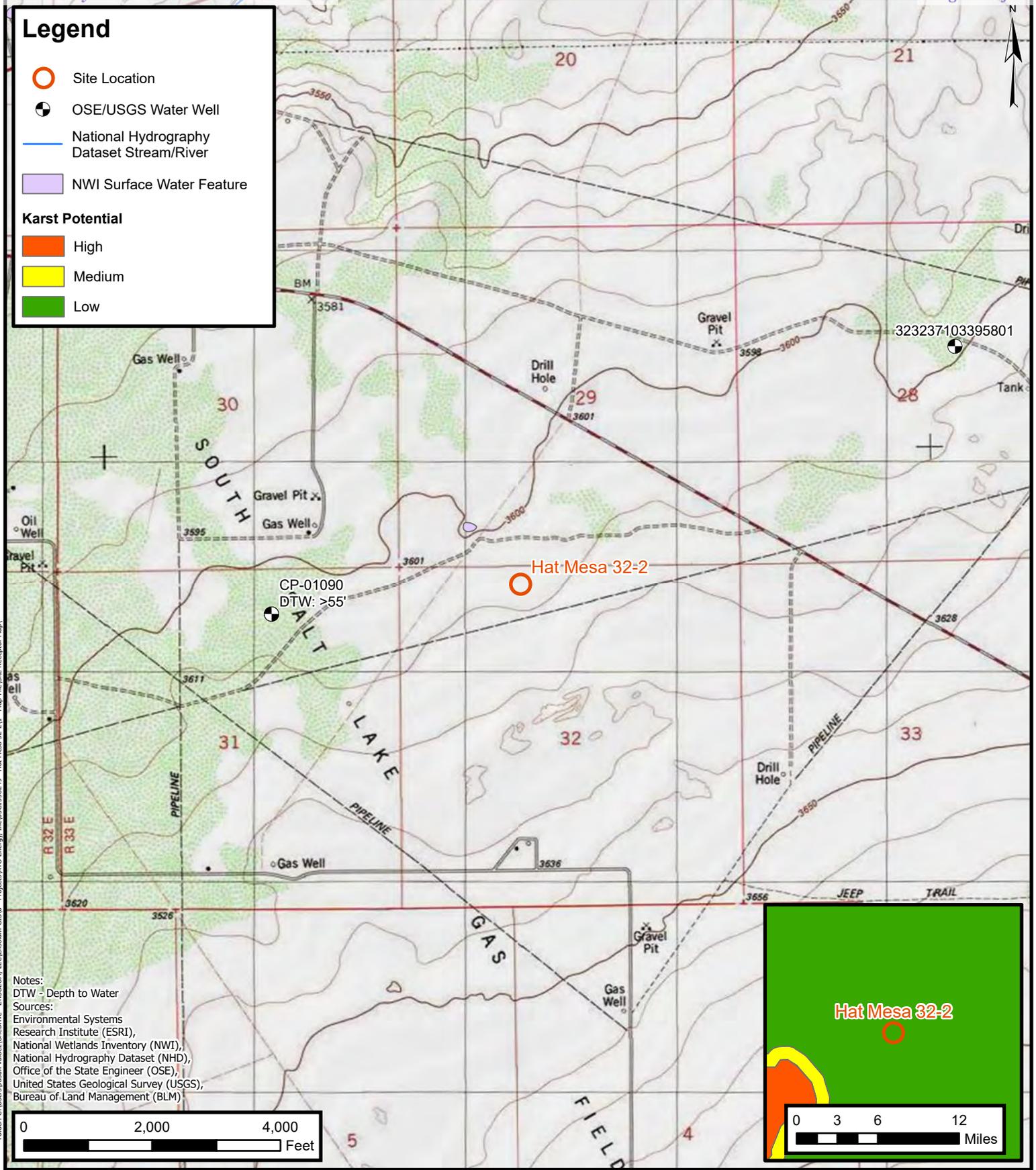
cc: Amy Ruth, XTO
 Amanda Garcia, XTO
 NMSLO

Appendices:

Figure 1 Site Receptor Map
 Figure 2 Excavation Soil Sample Locations
 Table 1 Soil Sample Analytical Results
 Appendix A Remediation Work Plan
 Appendix B Photographic Log
 Appendix C Laboratory Analytical Reports & Chain-of-Custody Documentation
 Appendix D NMOCD Correspondence



FIGURES



Folder: C:\Users\jvaitez\OneDrive - ENSOLUM, LLC\Ensolium GIS\0 - Projects\XTO Energy, Inc\03\1598249 - Hat Mesa 32-2\1 - Map File\Site Receptor Map

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map
XTO Energy Inc
Hat Mesa 32-2
Incident Number: nAPP2316046257
Unit C, Sec 25, T20S, R33E
Lea County, New Mexico

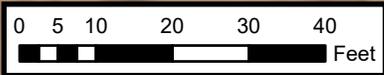
FIGURE
1

Legend

- Excavation Floor Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Sample in Compliance with Closure Criteria
- ▲ Removed Sidewall Sample
- Excavation Extent



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable Closure Criteria
 Grey text indicate soil sample was removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)



Excavation Soil Sample Locations

XTO Energy, Inc
 Hat Mesa 32-2
 Incident Number: NAPP2316046257
 Unit C, Sec 32, T20S, R33E
 Lea Co, New Mexico, United States

FIGURE

2



TABLES



**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Hat Mesa 32-2
XTO Energy, Inc
Lea County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCDC Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Delineation Soil Samples										
SS01	06/19/2023	0.5	<0.0090	1.00	371	2,280	448	5,450	3,100	4,210
BH01	07/14/2023	2	<0.00198	<0.00397	<49.5	189	<49.5	189	189	6,930
SS02	06/19/2023	0.5	<0.00201	<0.00402	<50.0	565	80.0	565	645	4,950
BH02	07/14/2023	1.5	<0.00198	<0.00396	<49.9	952	<49.9	952	952	17,400
SS03	06/19/2023	0.5	<0.00200	0.0424	194	1,620	332	1,810	2,150	6,560
BH03	07/14/2023	1	<0.00200	<0.00399	<50.2	79.6	<50.2	79.6	79.6	931
SS04	06/19/2023	0.5	<0.00996	2.70	2,120	13,800	2,860	15,900	18,800	451
BH04	07/14/2023	1	<0.00200	<0.00400	<50.3	2,720	<50.3	2,720	2,720	95
SS05	06/19/2023	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	47.1
SS06	06/19/2023	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	31.7
SS07	06/19/2023	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	44.7
SS08	06/19/2023	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	46.4
Confirmation Soil Samples										
FS01	11/01/2023	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	101
FS02	11/01/2023	4	<0.00200	<0.00401	<49.6	<49.6	<49.6	<49.6	<49.6	93.5
FS03	11/01/2023	4	<0.00199	<0.00398	<49.7	67.6	<49.7	67.6	67.6	115
FS04	11/01/2023	4	<0.00199	<0.00398	<49.9	110	<49.9	110	110	131
FS04A	11/21/2023	5	<0.00201	<0.00402	<49.6	<49.6	<49.6	<49.6	<49.6	7.12
FS05	11/01/2023	4	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	109
FS06	11/01/2023	4	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	67.5
FS07	11/01/2023	4	<0.00200	<0.00401	<50.3	<50.3	<50.3	<50.3	<50.3	143
FS08	11/01/2023	4	<0.00199	<0.00398	<50.5	51.1	<50.5	51.1	51.1	96.3
FS09	11/02/2023	4	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	106
FS10	11/02/2023	4	<0.00200	<0.00399	<50.5	<50.5	<50.5	<50.5	<50.5	122
FS11	11/02/2023	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	108
FS12	11/02/2023	3	<0.00200	<0.00400	<49.9	91.5	<49.9	91.5	91.5	105
FS13	11/02/2023	3	<0.00200	<0.00399	<50.2	70.8	<50.2	70.8	70.8	132
FS14	11/02/2023	3	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	187
FS15	11/02/2023	3	<0.00199	<0.00398	<50.5	56.3	<50.5	56.3	56.3	236
FS16	11/02/2023	3	<0.00199	<0.00398	<49.7	231	<49.7	231	231	129
FS16A	11/21/2023	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	38.0
FS17	11/02/2023	3	<0.00198	<0.00396	<49.7	187	<49.7	187	187	127
FS17A	11/21/2023	4	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	<50.1	6.85
FS18	11/02/2023	3	<0.00199	<0.00398	<50.4	114	<50.4	114	114	88.5
FS18A	11/21/2023	4	<0.00202	<0.00403	<50.4	<50.4	<50.4	<50.4	<50.4	10.9
FS19	11/02/2023	3	<0.00200	<0.00399	<49.8	104	<49.8	104	104	82.4
FS19A	11/21/2023	4	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	<50.5	35.3



**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Hat Mesa 32-2
XTO Energy, Inc
Lea County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
FS20	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	412
FS21	11/03/2023	3.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	36.1
FS22	11/03/2023	3	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	70.2
FS23	11/03/2023	3	<0.00200	<0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	71.2
FS24	11/03/2023	3	<0.00201	<0.00402	<50.5	<50.5	<50.5	<50.5	<50.5	439
FS25	11/03/2023	3	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	<50.1	60.1
FS26	11/03/2023	3	<0.00200	<0.00401	<50.4	<50.4	<50.4	<50.4	<50.4	136
FS27	11/03/2023	3	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	138
FS28	11/03/2023	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	133
FS29	11/03/2023	3	<0.00200	<0.00399	<50.2	<50.2	<50.2	<50.2	<50.2	259
FS30	11/03/2023	3	<0.00201	<0.00402	<50.4	<50.4	<50.4	<50.4	<50.4	362
FS31	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	68.5
FS32	11/03/2023	3	<0.00199	<0.00398	<49.5	<49.5	<49.5	<49.5	<49.5	61.9
FS33	11/03/2023	3	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	92.4
FS34	11/03/2023	3	<0.00200	<0.00399	<50.1	<50.1	<50.1	<50.1	<50.1	202
FS35	11/03/2023	3	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	<50.4	213
FS36	11/03/2023	3	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	135
FS37	11/03/2023	3	<0.00198	<0.00396	<49.5	<49.5	<49.5	<49.5	<49.5	97.6
FS38	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	371
SW01	11/01/2023	0 - 4	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	<50.4	84.8
SW02	11/01/2023	0-4	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	90.9
SW02A	11/21/2023	0 - 5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	19.4
SW03	11/01/2023	0 - 4	<0.00202	<0.00403	<49.7	76.3	<49.7	76.3	76.3	109
SW04	11/01/2023	0 - 4	<0.00199	<0.00398	<50.3	88.9	<50.3	88.9	88.9	131
SW05	11/02/2023	0-3	<0.00200	<0.00401	<49.6	149	<49.6	149	149	77.0
SW06	11/03/2023	0 - 3.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	80.2
SW07	11/03/2023	0 - 3	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	80.6
SW08	11/03/2023	0 - 3	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	102
SW09	11/03/2023	0 - 3	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	71.5
SW10	11/03/2023	0 - 3	<0.00198	<0.00397	<50.3	<50.3	<50.3	<50.3	<50.3	101
SW11	11/21/2023	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	17.7

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

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

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities or area was resampled



APPENDIX A

Remediation Work Plan & Work Plan Addendum



November 17, 2023

New Mexico Oil Conservation Division

1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Remediation Work Plan
Hat Mesa 32-2
Incident Number NAPP2316046257
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Remediation Work Plan (Work Plan)* to document site assessment, delineation, and excavation activities completed to date and proposes to conduct additional excavation activities to address impacted soil identified at the Hat Mesa 32-2 (Site). The purpose of the Site assessment and delineation activities was to determine the presence or absence of impacted soil resulting from a release of crude oil and produced water at the Site. Based on laboratory analytical results from delineation soil samples, impacted soil was identified and excavation activities to remove impacted soil followed. The following *Work Plan* proposes to conduct additional excavation of impacted soil.

RELEASE SUMMARY AND BACKGROUND

The Site is located in Unit C, Section 32, Township 20 South, Range 33 East, in Lea County, New Mexico (32.53601°, -103.68800°) and is associated with oil and gas exploration and production operations on New Mexico State Trust Land (STL) managed by the New Mexico State Land Office (NMSLO).

On May 27, 2023, corrosion on a steel flowline resulted in the release of 1.9 barrels (bbls) of crude oil and 15.40 bbls of produced water onto the surface of pasture area. A vacuum truck was dispatched to the Site to recover free standing fluids, approximately 3.0 bbls of released fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on June 9, 2023. The release was assigned Incident Number NAPP2316046257.

Since the release occurred on pasture land managed by NMSLO, XTO requested Right-of-Entry (ROE) access from the NMSLO, as well as an Archaeological Records Management Section (ARMS) review to ensure compliance with the Cultural Properties Protection (CPP) Rule. The ROE was approved by NMSLO on October 30, 2023. The ARMS review was completed and confirmed the area had been previously surveyed and no cultural properties were identified in the vicinity of the release and potential disturbance areas. A NMSLO Cultural Resources Cover Sheet documenting the results of the ARMS review was submitted to the Cultural Resource Office (CRO) of NMSLO on October 13, 2023 and can be found in Appendix A.

XTO Energy, Inc.
Remediation Work Plan
Hat Mesa 32-2

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is estimated to be between 50 feet and 100 feet below ground surface (bgs) based on nearby groundwater well data. The nearest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (OSE) well boring CP-01090, located approximately 0.71 miles west of the Site. The soil boring was drilled to a depth of 55 feet bgs and was dry. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a freshwater emergent wetland, located approximately 1,062 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Potential Site receptors are identified on Figure 1.

Based on the closest depth to groundwater data exceeding a distance of 0.5 miles from the Site, the following Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On June 19, 2023, Ensolum personnel conducted a Site assessment to evaluate the release extent based on information provided on the Form C-141 and visual observations. Eight delineation soil samples (SS01 through SS08) were collected at a depth of 0.5 feet bgs to assess the extent of the release. Soil samples SS01 through SS04 were collected within the release area and soil samples SS05 through SS08 were collected outside the release area. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following constituents of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil samples delivered to the laboratory the same day they are collected may not have equilibrated to the 6 degrees Celcius required for shipment and long term storage, but are considered by the laboratory to have been received in acceptable condition.

XTO Energy, Inc.
Remediation Work Plan
Hat Mesa 32-2

Based on elevated TPH and chloride concentrations observed in soil samples SS01 through SS04, additional delineation activities appeared to be warranted.

On July 14, 2023, Ensolum returned to the Site to oversee additional delineation activities. Boreholes BH01 through BH04 were advanced by use of hand auger in the vicinity of delineation soil samples SS01 through SS04, respectively. The boreholes were advanced to depths ranging from 1-foot to 2 feet bgs, all of which reached auger refusal due to a competent caliche bedrock unit at the terminal depth. Discrete soil samples were collected from each borehole at the terminal depth. The delineation soil samples were field screened, handled, and submitted for analysis as described above. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil sample locations are depicted on Figure 2. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix D.

EXCAVATION ACTIVITIES

Following an approved ROE and ARMS review survey, excavation activities were completed with a backhoe, track hoe, and transport vehicles, which was directed by previous delineation soil sample data and field screening of soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. All of the excavation area was located in the pasture. The excavation extent was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 3. Photographic documentation of excavation activities is presented in Appendix D.

Once field screenings indicated impacted soil was adequately removed, 5-point composite soil samples were collected every 200 square feet from the floor and sidewall of the excavation extent. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation soil samples FS01 through FS38 were collected from the floor of the excavation at depths ranging from 3 feet to 4 feet bgs. Confirmation soil samples SW01 through SW10 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The confirmation soil sample locations were mapped utilizing a GPS unit and are depicted on Figure 3.

The current excavation footprint is approximately 7,570 square feet and approximately 1,050 cubic yards of impacted soil has been transported to the R360 facility in Hobbs, New Mexico. The final excavation was fenced off pending backfilling.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation and excavation soil samples collected indicated benzene and BTEX concentrations were below the Site Closure Criteria. Delineation soil samples SS01/BH01 through SS04/BH04 indicated TPH and/or chloride concentrations exceeded Closure Criteria however, those delineation soil samples were removed during excavation activities.

Laboratory analytical results for all confirmation excavation soil samples collected indicate chloride concentrations were below Site Closure Criteria. Analytical results indicated TPH exists in excavation soil samples FS04, FS16 through FS19, and SW05 at concentrations ranging from 104 mg/kg to 231 mg/kg. All other confirmation soil samples collected indicated TPH concentrations were in compliance with the Site Closure Criteria. Laboratory Analytical Reports & Chain-of-Custody Documentation are presented in Appendix E. NMOCD notifications are presented in Appendix F.

PROPOSED REMEDIATION WORK PLAN

XTO Energy, Inc.
Remediation Work Plan
Hat Mesa 32-2

Site assessment, delineation, and excavation activities were conducted to assess the presence or absence of impacted soil resulting from a May 2023 release of crude oil and produced water. Based on laboratory analytical results from confirmation soil samples, TPH impacted soil exists across an approximate 830 square-foot area at depths ranging from 3 feet to 4 feet bgs. Horizontal definition of the release has been established from delineation soil samples SS05 through SS08 and confirmation sidewall soil samples SW01 through SW04, and SW06 through SW10.

XTO proposes to remove TPH impacted soil identified at the Site. The proposed excavation extent will remove failing confirmation floor soil samples FS04, FS16 through FS19, and sidewall soil sample SW05. Following the removal of impacted soil, 5-point composite soil samples will be collected every 200 square feet from the floor and sidewall of the final excavation extent. The soil samples will be handled and analyzed for COCs as described above and submitted to Eurofins for laboratory analysis. An estimated 30 cubic yards of impacted soil will be removed. The excavated soil will be transferred a New Mexico approved landfill facility for disposal. The excavation will be backfilled and recontoured to match pre-existing conditions.

XTO will complete the proposed excavation and soil sampling activities within the next few weeks. A *Closure Request* will be prepared documenting the final excavation activities described above, within 30 days following receipt of final laboratory analytical results. XTO believes this *Work Plan* is protective of human health, the environment, and groundwater. As such, XTO requests approval of this *Work Plan* by NMOCD. If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely,
Ensolum, LLC



Benjamin J. Belill
Project Geologist



Tacoma Morrissey
Senior Geologist, MS

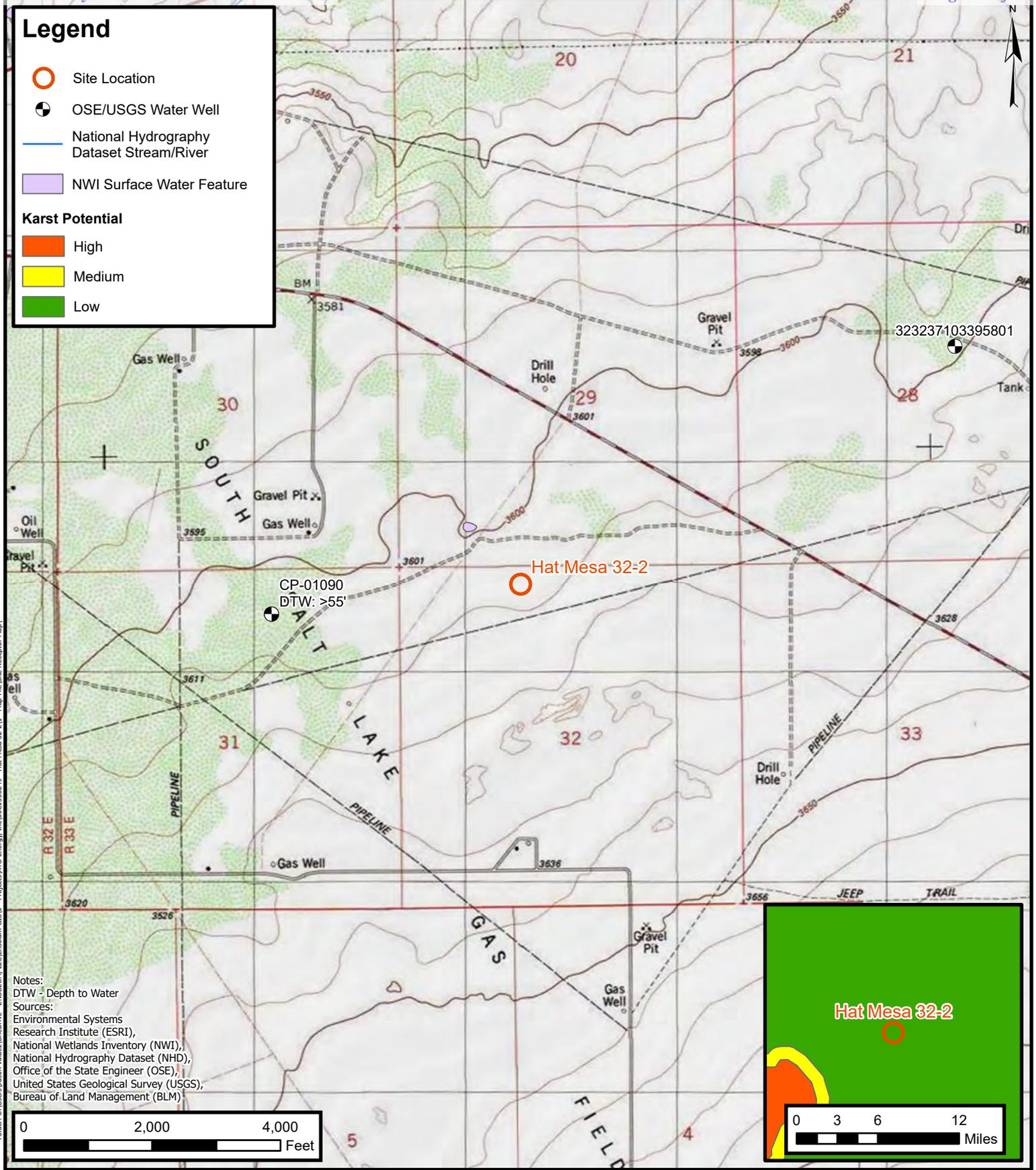
cc: Garrett Green, XTO
Tomme Lambert, XTO
NMSLO - ECO

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	NMSLO Cultural Resources Cover Sheet
Appendix B	Referenced Well Records
Appendix C	Lithologic / Soil Sampling Logs
Appendix D	Photographic Log
Appendix E	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix F	NMOCD Notifications/Correspondence



FIGURES



Folder: C:\Users\Justin.Velazquez\OneDrive - ENSOLUM, LLC\Ensolium GIS\0 - Projects\XTO Energy, Inc\03\1598249 - Hat Mesa 32-2\1 - Map File\Site Receptor Map

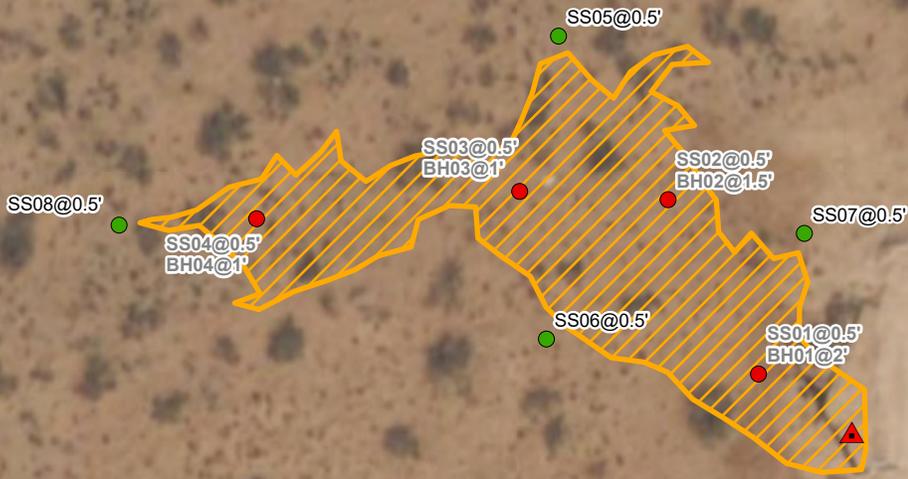


Site Receptor Map
 XTO Energy, Inc
 Hat Mesa 32-2
 Incident Number: nAPP2316046257
 Unit C, Sec 25, T20S, R33E
 Lea County, New Mexico

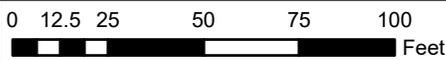
FIGURE
1

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Closure Criteria
- ▲ Release Point
- Release Extent



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable Closure Criteria.
 Grey text indicate soil sample was removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)

Delineation Soil Sample Locations

XTO Energy, Inc
 Hat Mesa 32-2
 Incident Number: NAPP2316046257
 Unit C, Sec 32, T20S, R33E
 Lea County, New Mexico

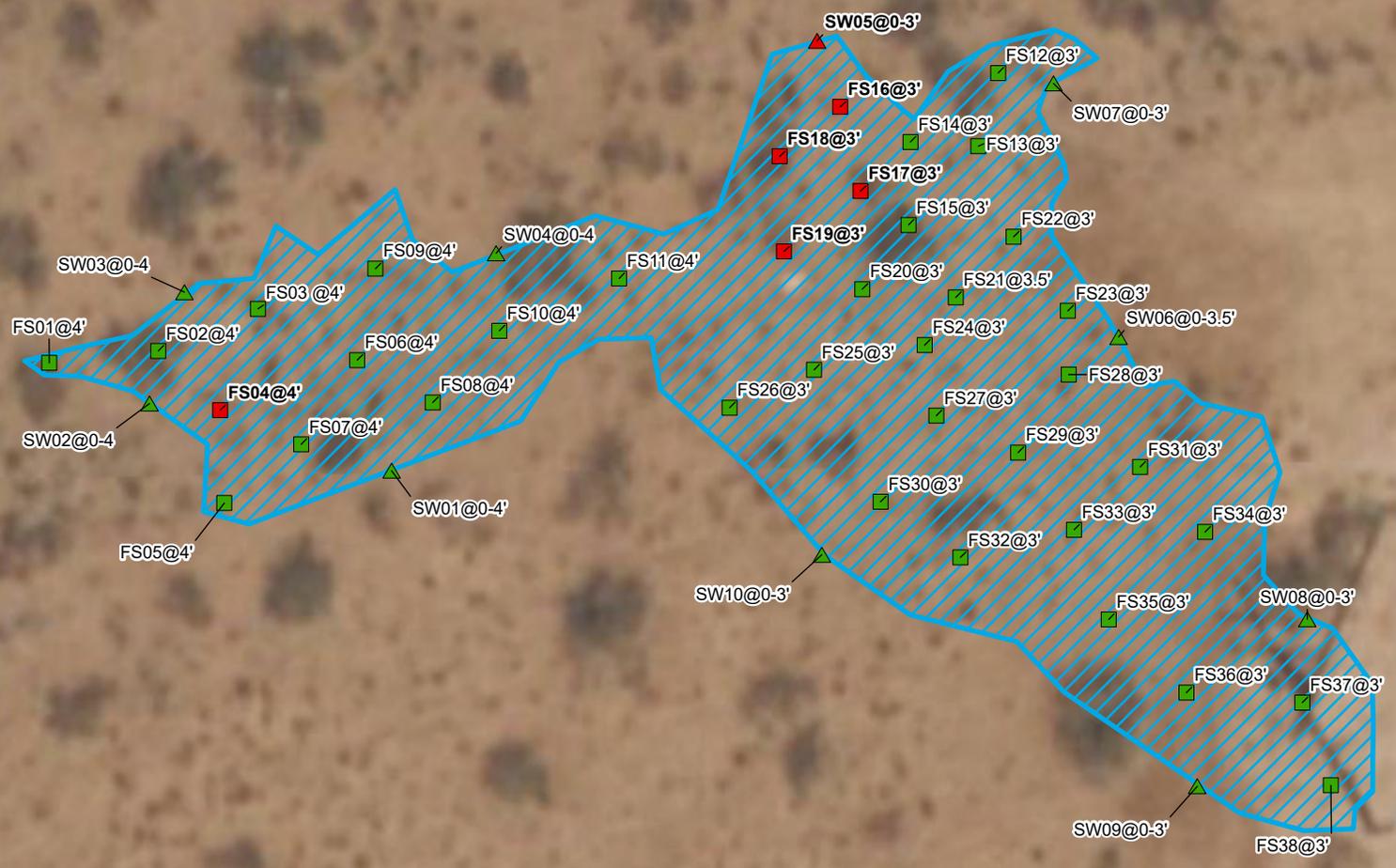
FIGURE

2



Legend

- Excavation Floor Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Sample in Compliance with Closure Criteria
- Excavation Floor Sample with Concentrations Exceeding Closure Criteria
- ▲ Excavation Sidewall Sample with Concentrations Exceeding Closure Criteria
- Excavation Extent



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable Closure Criteria.



Sources: Environmental Systems Research Institute (ESRI)



Excavation Soil Sample Locations

XTO Energy, Inc
 Hat Mesa 32-2
 Incident Number: NAPP2316046257
 Unit C, Sec 32, T20S, R33E
 Eddy County, New Mexico

FIGURE
3



TABLES



**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Hat Mesa 32-2
XTO Energy, Inc
Lea County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCB Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Delineation Soil Samples										
SS01	06/19/2023	0.5	<0.0990	1.00	371	2,280	448	5,450	3,100	4,210
BH01	07/14/2023	2	<0.00198	<0.00397	<49.5	189	<49.5	189	189	6,930
SS02	06/19/2023	0.5	<0.00204	<0.00402	<50.0	565	80.0	565	645	4,950
BH02	07/14/2023	1.5	<0.00198	<0.00396	<49.9	952	<49.9	952	952	17,400
SS03	06/19/2023	0.5	<0.00200	0.0424	194	1,620	332	1,810	2,150	6,560
BH03	07/14/2023	1	<0.00200	<0.00399	<50.2	79.6	<50.2	79.6	79.6	934
SS04	06/19/2023	0.5	<0.0996	2.70	2,120	13,800	2,860	15,900	18,800	454
BH04	07/14/2023	1	<0.00200	<0.00400	<50.3	2,720	<50.3	2,720	2,720	95
SS05	06/19/2023	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	47.1
SS06	06/19/2023	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	31.7
SS07	06/19/2023	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	44.7
SS08	06/19/2023	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	46.4
Confirmation Soil Samples										
FS01	11/01/2023	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	101
FS02	11/01/2023	4	<0.00200	<0.00401	<49.6	<49.6	<49.6	<49.6	<49.6	93.5
FS03	11/01/2023	4	<0.00199	<0.00398	<49.7	67.6	<49.7	67.6	67.6	115
FS04	11/01/2023	4	<0.00199	<0.00398	<49.9	110	<49.9	110	110	131
FS05	11/01/2023	4	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	109
FS06	11/01/2023	4	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	67.5
FS07	11/01/2023	4	<0.00200	<0.00401	<50.3	<50.3	<50.3	<50.3	<50.3	143
FS08	11/01/2023	4	<0.00199	<0.00398	<50.5	51.1	<50.5	51.1	51.1	96.3
FS09	11/02/2023	4	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	106
FS10	11/02/2023	4	<0.00200	<0.00399	<50.5	<50.5	<50.5	<50.5	<50.5	122
FS11	11/02/2023	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	108
FS12	11/02/2023	3	<0.00200	<0.00400	<49.9	91.5	<49.9	91.5	91.5	105
FS13	11/02/2023	3	<0.00200	<0.00399	<50.2	70.8	<50.2	70.8	70.8	132
FS14	11/02/2023	3	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	187
FS15	11/02/2023	3	<0.00199	<0.00398	<50.5	56.3	<50.5	56.3	56.3	236
FS16	11/02/2023	3	<0.00199	<0.00398	<49.7	231	<49.7	231	231	129
FS17	11/02/2023	3	<0.00198	<0.00396	<49.7	187	<49.7	187	187	127
FS18	11/02/2023	3	<0.00199	<0.00398	<50.4	114	<50.4	114	114	88.5
FS19	11/02/2023	3	<0.00200	<0.00399	<49.8	104	<49.8	104	104	82.4
FS20	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	412



**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Hat Mesa 32-2
XTO Energy, Inc
Lea County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCDC Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
FS21	11/03/2023	3.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	36.1
FS22	11/03/2023	3	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	70.2
FS23	11/03/2023	3	<0.00200	<0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	71.2
FS24	11/03/2023	3	<0.00201	<0.00402	<50.5	<50.5	<50.5	<50.5	<50.5	439
FS25	11/03/2023	3	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	<50.1	60.1
FS26	11/03/2023	3	<0.00200	<0.00401	<50.4	<50.4	<50.4	<50.4	<50.4	136
FS27	11/03/2023	3	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	138
FS28	11/03/2023	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	133
FS29	11/03/2023	3	<0.00200	<0.00399	<50.2	<50.2	<50.2	<50.2	<50.2	259
FS30	11/03/2023	3	<0.00201	<0.00402	<50.4	<50.4	<50.4	<50.4	<50.4	362
FS31	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	68.5
FS32	11/03/2023	3	<0.00199	<0.00398	<49.5	<49.5	<49.5	<49.5	<49.5	61.9
FS33	11/03/2023	3	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	92.4
FS34	11/03/2023	3	<0.00200	<0.00399	<50.1	<50.1	<50.1	<50.1	<50.1	202
FS35	11/03/2023	3	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	<50.4	213
FS36	11/03/2023	3	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	135
FS37	11/03/2023	3	<0.00198	<0.00396	<49.5	<49.5	<49.5	<49.5	<49.5	97.6
FS38	11/03/2023	3	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	371
SW01	11/01/2023	0 - 4	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	<50.4	84.8
SW02	11/01/2023	0 - 4	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	90.9
SW03	11/01/2023	0 - 4	<0.00202	<0.00403	<49.7	76.3	<49.7	76.3	76.3	109
SW04	11/01/2023	0 - 4	<0.00199	<0.00398	<50.3	88.9	<50.3	88.9	88.9	131
SW05	11/02/2023	0 - 3	<0.00200	<0.00401	<49.6	149	<49.6	149	149	77.0
SW06	11/03/2023	0 - 3.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	80.2
SW07	11/03/2023	0 - 3	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	80.6
SW08	11/03/2023	0 - 3	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	102
SW09	11/03/2023	0 - 3	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	71.5
SW10	11/03/2023	0 - 3	<0.00198	<0.00397	<50.3	<50.3	<50.3	<50.3	<50.3	101

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCDC: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCDC Table I Closure Criteria or reclamation requirement where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



APPENDIX A

NMSLO Cultural Resources Cover Sheet



Stephanie Garcia Richard, Commissioner of Public Lands
State of New Mexico

NMSLO Cultural Resources Cover Sheet Exhibit

NMCRIS Activity Number:
(if applicable)

Exhibit Type (select one)

ARMS Inspection/Review - Summarize the results (select one):

- (A) The entire area of potential effect or project area has been previously surveyed to current standards and **no cultural properties** were found within the survey area.
- (B) The entire area of potential effect or project area has been previously surveyed to current standards and **cultural properties were found** within the survey area.
- (C) The entire area of potential effect or project area has **not** been previously surveyed or **has not been surveyed** to current standards. A complete archaeological survey will be conducted and submitted for review.

Archaeological Survey

Findings:

- Negative** - No further archaeological review is required.
- Positive** - Have avoidance and protection measures been devised? Select one:

Comments:

Project Details:

NMSLO Lease Number (if available):
 Cultural Resources Consultant: Beaver Creek Archaeology
 Project Proponent (Applicant): Ensolum, LLC on behalf of XTO
 Project Title/Description: Hat Mesa 32-2 Remediation

Project Location:

County(ies): Lea
 PLSS/Section/Township/Range): T20S R33E S32

For NMSLO Agency Use Only:

NMSLO Lease Number: Acknowledgment-Only:
 Lease Analyst:
 Date Exhibit Routed to Cultural Resources Office:

No person may alter the wording of the questions or layout of the cover sheet. The completion of this cover sheet by itself does not authorize anyone to engage in new surface disturbing activity before the review and approvals required by the Cultural Properties Protections Rule.



Beaver Creek ARCHAEOLOGY

Hat Mesa 32-2
Ensolum, LLC
T20S R33E Sec. 32
Laguna Gatuna (1984) Quad. Map
Upper Pecos-Black Drainage
Lea County, New Mexico

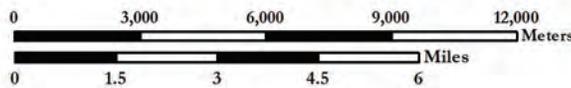


Lea County, New Mexico



Legend

 Project Location

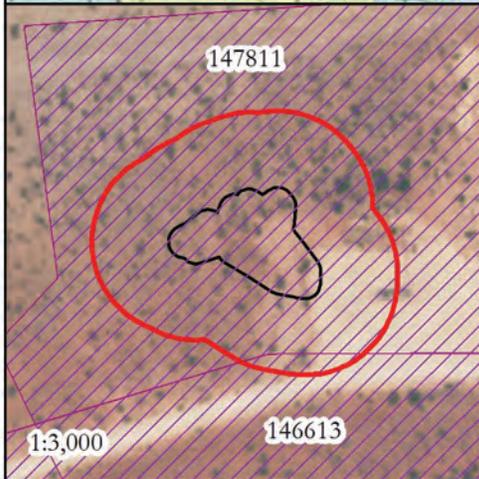
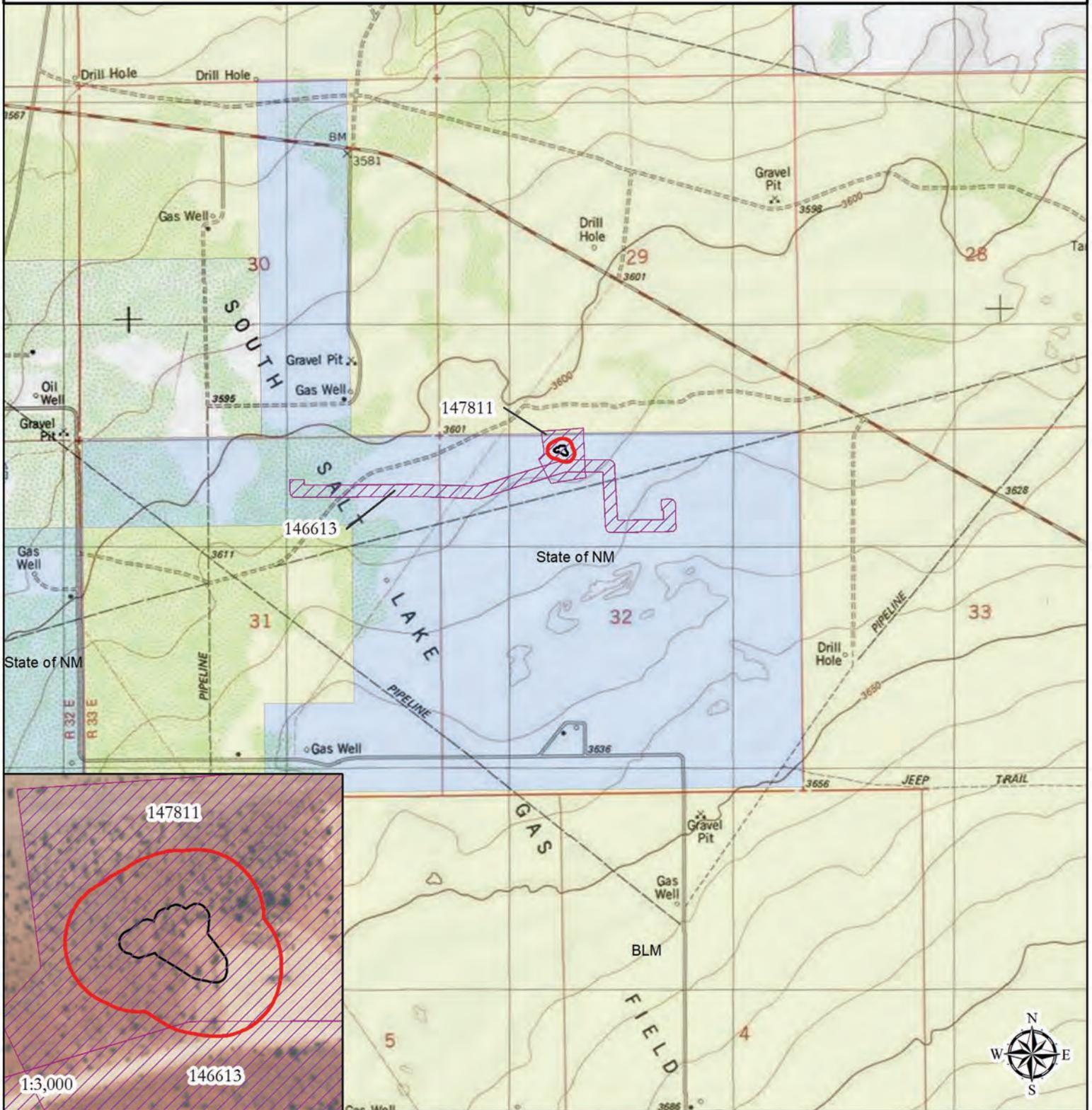


Base Map: USGS 7.5'
Scale: 1:180,000
UTM NAD83 Zone 13



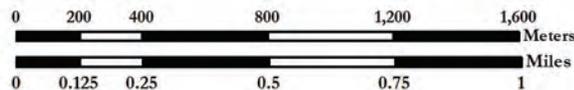
Beaver Creek ARCHAEOLOGY

Hat Mesa 32-2
Ensolum, LLC
T20S R33E Sec. 32
Laguna Gatuna (1984) Quad. Map
Upper Pecos-Black Drainage
Lea County, New Mexico



Legend

-  Project Area (2 Acres)
-  Previously Surveyed (2 Acres)
-  APE (0.4 Acres)



Base Map: USGS 7.5'
Scale: 1:24,000
UTM NAD83 Zone 13





APPENDIX B

Referenced Well Records



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1		WELL TAG ID NO.		OSE FILE NO(S) CP-1090			
	WELL OWNER NAME(S) Devon Energy Corporation				PHONE (OPTIONAL) 405-318-4697			
	WELL OWNER MAILING ADDRESS 6488 Seven Rivers Highway				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 36	SECONDS 39.32	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 104	4	58.53	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Unit Letter "N", Section 33, T19S, R29E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1755		NAME OF LICENSED DRILLER John Norris			NAME OF WELL DRILLING COMPANY Hungry Horse, LLC		
	DRILLING STARTED 7/15/2022	DRILLING ENDED 7/15/2022	DEPTH OF COMPLETED WELL (FT)		BORE HOLE DEPTH (FT) 55	DEPTH WATER FIRST ENCOUNTERED (FT) NA		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) NA	DATE STATIC MEASURED		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
				No Casing				
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	55	6	Bentonite grout	10.8	tremie		

OSE 077 11:37 2022 PM 1 42

FOR OSE INTERNAL USE				WR-20 WELL RECORD & LOG (Version 01/28/2022)			
FILE NO.	CP-01090	POD NO.	1	TRN NO.	602836		
LOCATION	205.33E.31.1.1.2			WELL TAG ID NO.	PAGE 1 OF 2		

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		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)
	FROM	TO			Y	N	
	0	20	20	Sand	Y	✓ N	
	20	30	10	Caliche	Y	✓ N	
	30	35	5	Clay	Y	✓ N	
	35	55	20	Gypsum	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: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input checked="" type="checkbox"/> OTHER - SPECIFY: Not tested					TOTAL ESTIMATED WELL YIELD (gpm): 0.00		

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:	Borehole was drilled as per NMOCD. Drill a 55' borehole, wait 72 hours, then gauge for presence of water. No water was present so borehole was plugged. 100% W/ AUG 5 2022 PML/ML2
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Dean Parent	

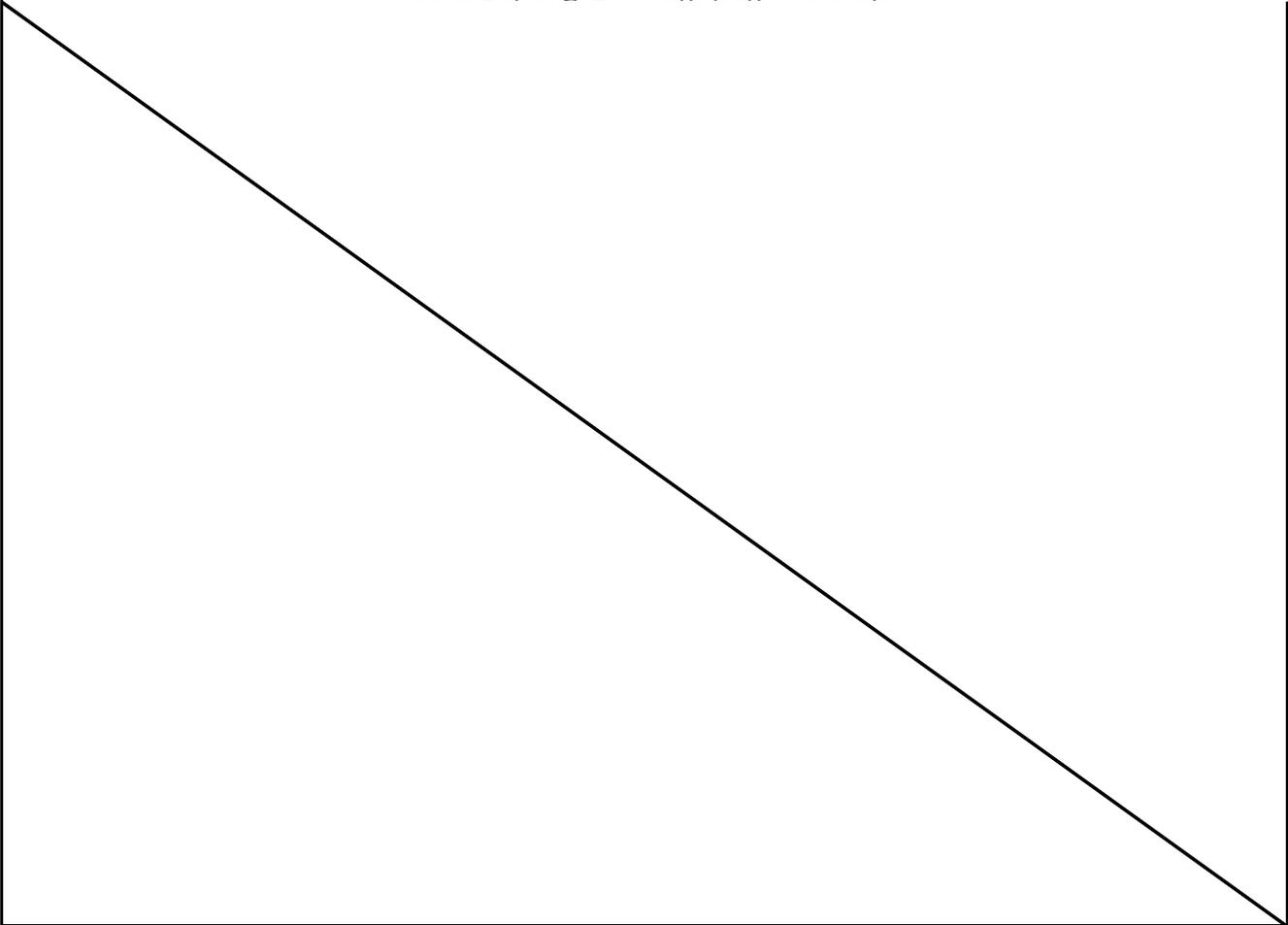
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	_____ SIGNATURE OF DRILLER / PRINT SIGNEE NAME	_____ DATE

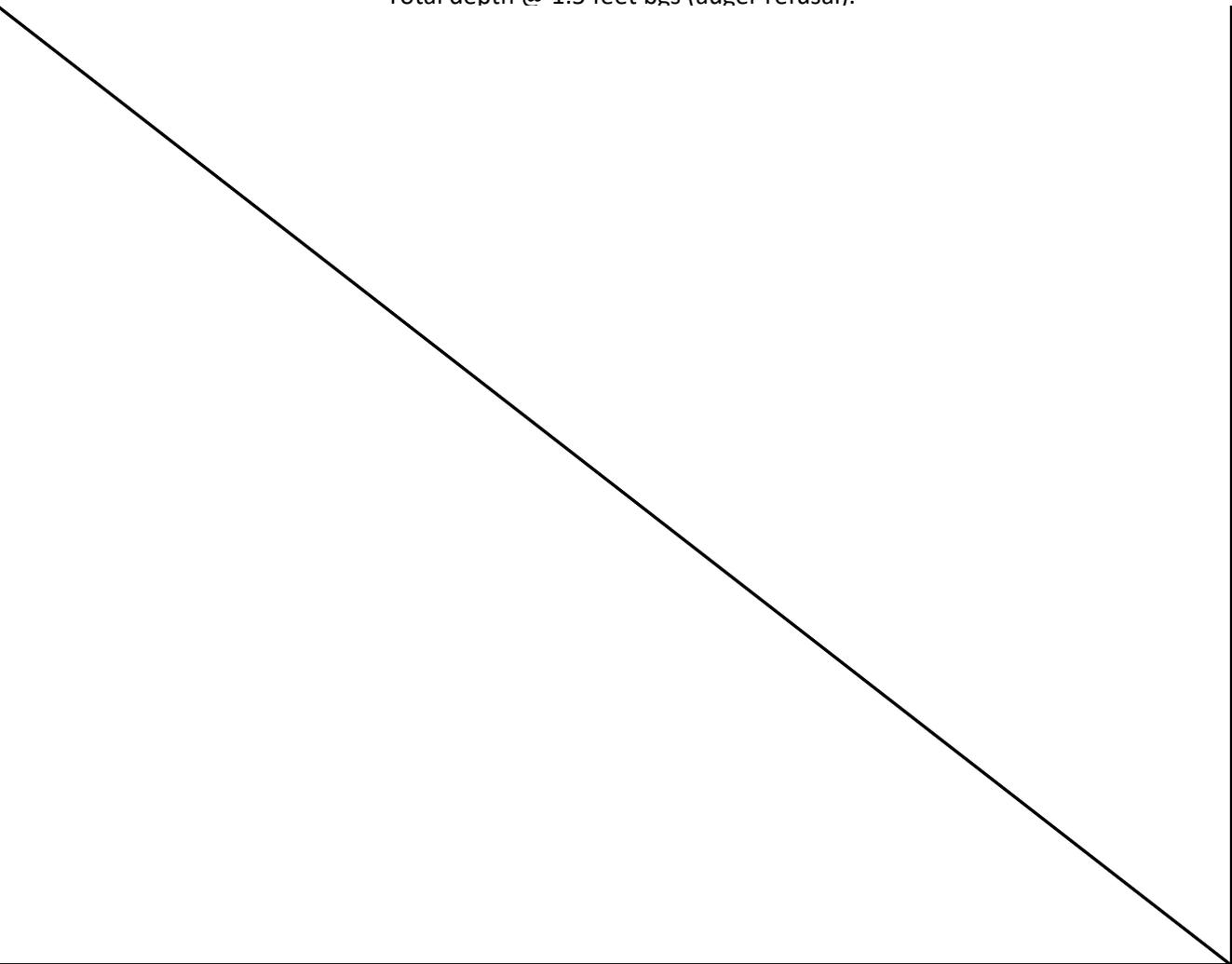
FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO. CP-01090	POD NO. 1	TRN NO. 602836	
LOCATION 205.33E-3L.1.1.2	WELL TAG ID NO.	PAGE 2 OF 2	

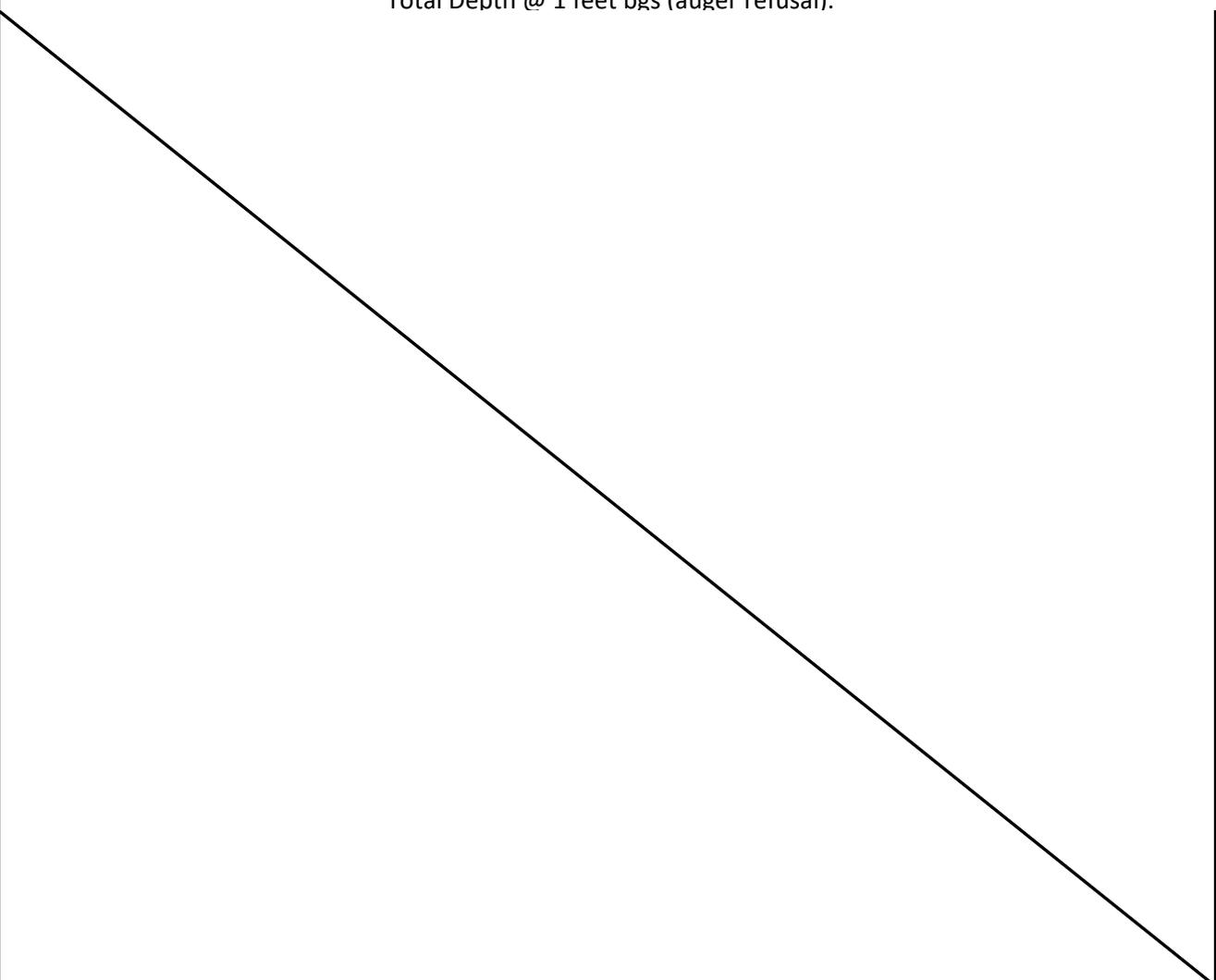


APPENDIX C

Lithologic Soil Sampling Logs

					Sample Name: BH01		Date: 7/14/2023		
					Site Name: Hat Mesa 32-2				
					Incident Number: nAPP2316046257				
					Job Number: 03C1558249				
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: Mariaha O'Dell		Method: Hand Auger		
Coordinates: 32.536036, -103.688066					Hole Diameter: 3.5"		Total Depth: 2' bgs		
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.									
Moisture	Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	6,820	502	Y	SS01	0.5	0	SP	SAND, brown, poorly graded, very fine grain, some silt, dark brown staining, strong H/C odor.	
M	19,768	0.0	Y			1			
M	9,240	0.0	N	BH01	2	2			No stain and mild H/C odor.
Total Depth @ 2 feet bgs (auger refusal).									
									

					Sample Name: BH02		Date: 7/14/2023	
					Site Name: Hat Mesa 32-2			
					Incident Number: nAPP2316046257			
					Job Number: 03C1558249			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: Mariaha O'Dell		Method: Hand Auger	
Coordinates: 32.536162, -103.688143					Hole Diameter: 3.5"		Total Depth: 1.5' bgs	
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.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	6,820	24.1	Y	SS02	0.5	0	SP	SAND, brown, poorly graded, very fine grain, some silt, dark brown staining, strong H/C odor.
M	790	0.0	N			1		
M	246	32.8	N	BH02	1.5			No stain and mild H/C odor.
Total depth @ 1.5 feet bgs (auger refusal).								
								

					Sample Name: BH03		Date: 7/14/2023	
					Site Name: Hat Mesa 32-2			
					Incident Number: nAPP2316046257			
					Job Number: 03C1558249			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: Mariaha O'Dell		Method: Hand Auger	
Coordinates: 32.536169, -103.688270					Hole Diameter: 3.5"		Total Depth: 1' bgs	
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.								
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	13,232	267	Y	SS03	0.5	0	SP	SAND, brown, poorly graded, very fine grain, some silt, dark brown staining, strong H/C odor.
M	549	0.0	N	BH03	1	1		No stain and mild H/C odor.
Total Depth @ 1 feet bgs (auger refusal).								
								

					Sample Name: BH04		Date: 7/14/2023	
					Site Name: Hat Mesa 32-2			
					Incident Number: nAPP2316046257			
					Job Number: 03C1558249			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: Mariaha O'Dell		Method: Hand Auger	
Coordinates: 32.536149, -103.688493					Hole Diameter: 3.5"		Total Depth: 1' bgs	
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.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	212	607	Y	SS04	0.5	0	SP	SAND, brown, poorly graded, very fine grain, some silt, dark brown staining, strong H/C odor.
M	16,486	28.5	N	BH04	1	1		No stain and mild H/C odor.
Total Depth @ 1 feet bgs (auger refusal).								



APPENDIX D
Photographic Log



Photographic Log
XTO Energy, Inc
Hat Mesa 32 - 2
Incident Number nAPP2316046257

Date & Time: Fri, Jun 19, 2023 at 09:46:37 MDT
Position: +32.536063, -103.687977
Altitude: 3614.9ft
Datum: NAD83
Azimuth/Bearing: 302° N89W 509mils True (+14°)
Elevation Angle: -43.4°
Horizon Angle: -01.6°
Event: 107
Hat Mesa 32 - 2 release looking northwest



Date & Time: Fri, Jul 14, 2023 at 10:16:25 MDT
Position: +32.536154, -103.688315
Altitude: 3609ft (+156.0ft)
Datum: NAD83
Azimuth/Bearing: 090° N0E 1067mils True (+11°)
Elevation Angle: -21.3°
Horizon Angle: -01.2°
Event: 107
CH3401 - 03
Marina - 0.001



Photograph 1 Date: 6/19/2023
Description: Site assessment activities, release extent
View: Northwest

Photograph 2 Date: 7/14/2023
Description: Delineation activities, BH04
View: East

Nov 3, 2023 at 13:21:33
+32.536063, -103.688253
107° E
Altitude: 3614.9ft
Speed: 1.6mph



Nov 3, 2023 at 11:01:52
225° SW
Altitude: 3618.8ft
Speed: 2.3mph



Photograph 3 Date: 11/3/2023
Description: Excavation extent
View: East

Photograph 4 Date: 11/3/2023
Description: Excavation extent
View: Southwest



APPENDIX E

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 6/26/2023 10:43:50 AM

JOB DESCRIPTION

Hat Mesa 32-2
 SDG NUMBER 03C1558249

JOB NUMBER

890-4836-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



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
6/26/2023 10:43:50 AM

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

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Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-4836-1
SDG: 03C1558249

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Job ID: 890-4836-1

Laboratory: Eurofins Carlsbad**Narrative**

**Job Narrative
890-4836-1****Receipt**

The samples were received on 6/19/2023 3:52 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 5.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-4836-1), SS02 (890-4836-2), SS03 (890-4836-3), SS04 (890-4836-4), SS05 (890-4836-5), SS06 (890-4836-6), SS07 (890-4836-7) and SS08 (890-4836-8).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-56020 and analytical batch 880-56082 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 laboratory control sample duplicate (LCSD) for preparation batch 880-56020 and analytical batch 880-56082 recovered outside control limits for the following analytes: Toluene. Only an LCS or an LCSD need to be acceptable per the method and the RPD was acceptable; therefore, the data was qualified and reported.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-56026 and analytical batch 880-56147 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SS05 (890-4836-5). 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: SS03 (890-4836-3) and SS04 (890-4836-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike (MS) recoveries for preparation batch 880-56026 and analytical batch 880-56147 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS01

Lab Sample ID: 890-4836-1

Date Collected: 06/19/23 09:25

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0990	U	0.0990	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
Toluene	0.192	+	0.0990	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
Ethylbenzene	0.292		0.0990	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
m-Xylene & p-Xylene	0.355		0.198	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
o-Xylene	0.162		0.0990	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
Xylenes, Total	0.517		0.198	mg/Kg		06/21/23 13:48	06/23/23 06:13	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	06/21/23 13:48	06/23/23 06:13	50
1,4-Difluorobenzene (Surr)	89		70 - 130	06/21/23 13:48	06/23/23 06:13	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.00		0.198	mg/Kg			06/23/23 14:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3100		249	mg/Kg			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	371		249	mg/Kg		06/21/23 14:55	06/23/23 17:58	5
Diesel Range Organics (Over C10-C28)	2280		249	mg/Kg		06/21/23 14:55	06/23/23 17:58	5
Oil Range Organics (Over C28-C36)	448		249	mg/Kg		06/21/23 14:55	06/23/23 17:58	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	06/21/23 14:55	06/23/23 17:58	5
o-Terphenyl	116		70 - 130	06/21/23 14:55	06/23/23 17:58	5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4210		49.6	mg/Kg			06/21/23 19:30	10

Client Sample ID: SS02

Lab Sample ID: 890-4836-2

Date Collected: 06/19/23 09:30

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
Toluene	<0.00201	U *+ F1	0.00201	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
Ethylbenzene	<0.00201	U F1	0.00201	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
o-Xylene	<0.00201	U F1	0.00201	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
Xylenes, Total	<0.00402	U F1	0.00402	mg/Kg		06/21/23 13:48	06/23/23 03:30	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS02

Lab Sample ID: 890-4836-2

Date Collected: 06/19/23 09:30

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	06/21/23 13:48	06/23/23 03:30	1
1,4-Difluorobenzene (Surr)	92		70 - 130	06/21/23 13:48	06/23/23 03:30	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			06/23/23 14:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	645		50.0	mg/Kg			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/21/23 14:55	06/23/23 21:05	1
Diesel Range Organics (Over C10-C28)	565		50.0	mg/Kg		06/21/23 14:55	06/23/23 21:05	1
Oil Range Organics (Over C28-C36)	80.0		50.0	mg/Kg		06/21/23 14:55	06/23/23 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	06/21/23 14:55	06/23/23 21:05	1
o-Terphenyl	126		70 - 130	06/21/23 14:55	06/23/23 21:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4950		49.9	mg/Kg			06/21/23 19:48	10

Client Sample ID: SS03

Lab Sample ID: 890-4836-3

Date Collected: 06/19/23 09:35

Matrix: Solid

Date Received: 06/19/23 15:52

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		06/21/23 13:48	06/23/23 03:50	1
Toluene	<0.00200	U *+	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:50	1
Ethylbenzene	0.00649		0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:50	1
m-Xylene & p-Xylene	0.0171		0.00401	mg/Kg		06/21/23 13:48	06/23/23 03:50	1
o-Xylene	0.0188		0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:50	1
Xylenes, Total	0.0359		0.00401	mg/Kg		06/21/23 13:48	06/23/23 03:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	06/21/23 13:48	06/23/23 03:50	1
1,4-Difluorobenzene (Surr)	92		70 - 130	06/21/23 13:48	06/23/23 03:50	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0424		0.00401	mg/Kg			06/23/23 14:13	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS03

Lab Sample ID: 890-4836-3

Date Collected: 06/19/23 09:35

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2150		50.0	mg/Kg			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	194		50.0	mg/Kg		06/21/23 14:55	06/23/23 20:19	1
Diesel Range Organics (Over C10-C28)	1620		50.0	mg/Kg		06/21/23 14:55	06/23/23 20:19	1
Oil Range Organics (Over C28-C36)	332		50.0	mg/Kg		06/21/23 14:55	06/23/23 20:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130			06/21/23 14:55	06/23/23 20:19	1
o-Terphenyl	135	S1+	70 - 130			06/21/23 14:55	06/23/23 20:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6560		50.2	mg/Kg			06/21/23 19:53	10

Client Sample ID: SS04

Lab Sample ID: 890-4836-4

Date Collected: 06/19/23 09:40

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0996	U	0.0996	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
Toluene	1.39	*+	0.0996	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
Ethylbenzene	0.513		0.0996	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
m-Xylene & p-Xylene	0.491		0.199	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
o-Xylene	0.307		0.0996	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
Xylenes, Total	0.798		0.199	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			06/21/23 13:48	06/23/23 06:33	50
1,4-Difluorobenzene (Surr)	75		70 - 130			06/21/23 13:48	06/23/23 06:33	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	2.70		0.199	mg/Kg			06/23/23 14:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	18800		499	mg/Kg			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	2120		499	mg/Kg		06/21/23 14:55	06/23/23 18:22	10
Diesel Range Organics (Over C10-C28)	13800		499	mg/Kg		06/21/23 14:55	06/23/23 18:22	10

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS04

Lab Sample ID: 890-4836-4

Date Collected: 06/19/23 09:40

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	2860		499	mg/Kg		06/21/23 14:55	06/23/23 18:22	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	338	S1+	70 - 130			06/21/23 14:55	06/23/23 18:22	10
o-Terphenyl	532	S1+	70 - 130			06/21/23 14:55	06/23/23 18:22	10

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	451		5.03	mg/Kg			06/21/23 19:59	1

Client Sample ID: SS05

Lab Sample ID: 890-4836-5

Date Collected: 06/19/23 09:55

Matrix: Solid

Date Received: 06/19/23 15:52

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		06/21/23 13:48	06/23/23 04:11	1
Toluene	<0.00198	U *	0.00198	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			06/21/23 13:48	06/23/23 04:11	1
1,4-Difluorobenzene (Surr)	97		70 - 130			06/21/23 13:48	06/23/23 04:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			06/23/23 14:13	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			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 12:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9	mg/Kg		06/21/23 14:55	06/23/23 12:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 12:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130			06/21/23 14:55	06/23/23 12:14	1
o-Terphenyl	137	S1+	70 - 130			06/21/23 14:55	06/23/23 12:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.1		4.98	mg/Kg			06/21/23 20:05	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS06

Lab Sample ID: 890-4836-6

Date Collected: 06/19/23 10:00

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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		06/21/23 13:48	06/23/23 04:31	1
Toluene	<0.00201	U **	0.00201	mg/Kg		06/21/23 13:48	06/23/23 04:31	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/21/23 13:48	06/23/23 04:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		06/21/23 13:48	06/23/23 04:31	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		06/21/23 13:48	06/23/23 04:31	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/21/23 13:48	06/23/23 04:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	06/21/23 13:48	06/23/23 04:31	1
1,4-Difluorobenzene (Surr)	94		70 - 130	06/21/23 13:48	06/23/23 04:31	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			06/23/23 14:13	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			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 13:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 13:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	06/21/23 14:55	06/23/23 13:22	1
o-Terphenyl	106		70 - 130	06/21/23 14:55	06/23/23 13:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.7		4.99	mg/Kg			06/21/23 20:23	1

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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		06/21/23 13:48	06/23/23 04:51	1
Toluene	<0.00202	U **	0.00202	mg/Kg		06/21/23 13:48	06/23/23 04:51	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/21/23 13:48	06/23/23 04:51	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		06/21/23 13:48	06/23/23 04:51	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/21/23 13:48	06/23/23 04:51	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		06/21/23 13:48	06/23/23 04:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	06/21/23 13:48	06/23/23 04:51	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	06/21/23 13:48	06/23/23 04:51	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			06/23/23 14:13	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			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 13:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 13:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	06/21/23 14:55	06/23/23 13:45	1
o-Terphenyl	130		70 - 130	06/21/23 14:55	06/23/23 13:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.7		4.99	mg/Kg			06/21/23 20:28	1

Client Sample ID: SS08

Lab Sample ID: 890-4836-8

Date Collected: 06/19/23 10:10

Matrix: Solid

Date Received: 06/19/23 15:52

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		06/21/23 13:48	06/23/23 05:12	1
Toluene	<0.00199	U *	0.00199	mg/Kg		06/21/23 13:48	06/23/23 05:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		06/21/23 13:48	06/23/23 05:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/21/23 13:48	06/23/23 05:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		06/21/23 13:48	06/23/23 05:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/21/23 13:48	06/23/23 05:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	06/21/23 13:48	06/23/23 05:12	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/21/23 13:48	06/23/23 05:12	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/23/23 14:13	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			06/26/23 11:27	1

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
 SDG: 03C1558249

Client Sample ID: SS08

Lab Sample ID: 890-4836-8

Date Collected: 06/19/23 10:10

Matrix: Solid

Date Received: 06/19/23 15:52

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		06/21/23 14:55	06/23/23 14:08	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 14:08	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/21/23 14:55	06/23/23 14:08	1
o-Terphenyl	112		70 - 130	06/21/23 14:55	06/23/23 14:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.4		5.00	mg/Kg			06/21/23 20:34	1

Surrogate Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-4836-1	SS01	124	89
890-4836-2	SS02	90	92
890-4836-2 MS	SS02	107	93
890-4836-2 MSD	SS02	108	94
890-4836-3	SS03	107	92
890-4836-4	SS04	92	75
890-4836-5	SS05	104	97
890-4836-6	SS06	104	94
890-4836-7	SS07	99	95
890-4836-8	SS08	103	97
LCS 880-56020/1-A	Lab Control Sample	109	97
LCSD 880-56020/2-A	Lab Control Sample Dup	109	88
MB 880-56020/5-A	Method Blank	96	107
MB 880-56064/5-A	Method Blank	106	106

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-4836-1	SS01	111	116
890-4836-2	SS02	110	126
890-4836-3	SS03	132 S1+	135 S1+
890-4836-4	SS04	338 S1+	532 S1+
890-4836-5	SS05	125	137 S1+
890-4836-5 MS	SS05	94	99
890-4836-5 MSD	SS05	106	112
890-4836-6	SS06	94	106
890-4836-7	SS07	112	130
890-4836-8	SS08	102	112
LCS 880-56026/2-A	Lab Control Sample	80	95
LCSD 880-56026/3-A	Lab Control Sample Dup	90	105
MB 880-56026/1-A	Method Blank	120	141 S1+

Surrogate Legend
1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-56020/5-A
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56020

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/21/23 13:48	06/23/23 03:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	06/21/23 13:48	06/23/23 03:01	1
1,4-Difluorobenzene (Surr)	107		70 - 130	06/21/23 13:48	06/23/23 03:01	1

Lab Sample ID: LCS 880-56020/1-A
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1290		mg/Kg		129	70 - 130
Toluene	0.100	0.1315	*+	mg/Kg		131	70 - 130
Ethylbenzene	0.100	0.1183		mg/Kg		118	70 - 130
m-Xylene & p-Xylene	0.200	0.2114		mg/Kg		106	70 - 130
o-Xylene	0.100	0.09951		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-56020/2-A
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1295		mg/Kg		129	70 - 130	0	35
Toluene	0.100	0.1279		mg/Kg		128	70 - 130	3	35
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2161		mg/Kg		108	70 - 130	2	35
o-Xylene	0.100	0.1009		mg/Kg		101	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 890-4836-2 MS
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.0996	0.06434	F1	mg/Kg		65	70 - 130
Toluene	<0.00201	U *+ F1	0.0996	0.04456	F1	mg/Kg		45	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

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

Lab Sample ID: 890-4836-2 MS
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00201	U F1	0.0996	0.03332	F1	mg/Kg		33	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.06017	F1	mg/Kg		30	70 - 130
o-Xylene	<0.00201	U F1	0.0996	0.02881	F1	mg/Kg		29	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-4836-2 MSD
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00201	U F1	0.0994	0.05300	F1	mg/Kg		53	70 - 130	19	35
Toluene	<0.00201	U *+ F1	0.0994	0.03512	F1	mg/Kg		35	70 - 130	24	35
Ethylbenzene	<0.00201	U F1	0.0994	0.02817	F1	mg/Kg		28	70 - 130	17	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.05391	F1	mg/Kg		27	70 - 130	11	35
o-Xylene	<0.00201	U F1	0.0994	0.02499	F1	mg/Kg		25	70 - 130	14	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: MB 880-56064/5-A
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56064

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/22/23 11:03	06/22/23 15:21	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	106		70 - 130	06/22/23 11:03	06/22/23 15:21	1
1,4-Difluorobenzene (Surr)	106		70 - 130	06/22/23 11:03	06/22/23 15:21	1

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

Lab Sample ID: MB 880-56026/1-A
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56026

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/21/23 14:55	06/23/23 09:08	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

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

Lab Sample ID: MB 880-56026/1-A
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56026

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/21/23 14:55	06/23/23 09:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/21/23 14:55	06/23/23 09:08	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	120		70 - 130	06/21/23 14:55	06/23/23 09:08	1
o-Terphenyl	141	S1+	70 - 130	06/21/23 14:55	06/23/23 09:08	1

Lab Sample ID: LCS 880-56026/2-A
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56026

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	879.9		mg/Kg		88	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	80		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: LCSD 880-56026/3-A
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56026

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	832.1		mg/Kg		83	70 - 130	6	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	90		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: 890-4836-5 MS
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 56026

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	809.9		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	664.8	F1	mg/Kg		64	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	94		70 - 130
o-Terphenyl	99		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

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

Lab Sample ID: 890-4836-5 MSD
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 56026

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	883.4		mg/Kg		86	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	761.6		mg/Kg		74	70 - 130	14	20
Surrogate	%Recovery	MSD Qualifier		MSD						Limits	
1-Chlorooctane	106									70 - 130	
o-Terphenyl	112									70 - 130	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-55910/1-A
Matrix: Solid
Analysis Batch: 56018

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			06/21/23 19:13	1

Lab Sample ID: LCS 880-55910/2-A
Matrix: Solid
Analysis Batch: 56018

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-55910/3-A
Matrix: Solid
Analysis Batch: 56018

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	249.3		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-4836-1 MS
Matrix: Solid
Analysis Batch: 56018

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4210		2480	6693		mg/Kg		100	90 - 110

Lab Sample ID: 890-4836-1 MSD
Matrix: Solid
Analysis Batch: 56018

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4210		2480	6693		mg/Kg		100	90 - 110	0	20

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

GC VOA

Prep Batch: 56020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	5035	
890-4836-2	SS02	Total/NA	Solid	5035	
890-4836-3	SS03	Total/NA	Solid	5035	
890-4836-4	SS04	Total/NA	Solid	5035	
890-4836-5	SS05	Total/NA	Solid	5035	
890-4836-6	SS06	Total/NA	Solid	5035	
890-4836-7	SS07	Total/NA	Solid	5035	
890-4836-8	SS08	Total/NA	Solid	5035	
MB 880-56020/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-56020/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-56020/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4836-2 MS	SS02	Total/NA	Solid	5035	
890-4836-2 MSD	SS02	Total/NA	Solid	5035	

Prep Batch: 56064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-56064/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 56082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	8021B	56020
890-4836-2	SS02	Total/NA	Solid	8021B	56020
890-4836-3	SS03	Total/NA	Solid	8021B	56020
890-4836-4	SS04	Total/NA	Solid	8021B	56020
890-4836-5	SS05	Total/NA	Solid	8021B	56020
890-4836-6	SS06	Total/NA	Solid	8021B	56020
890-4836-7	SS07	Total/NA	Solid	8021B	56020
890-4836-8	SS08	Total/NA	Solid	8021B	56020
MB 880-56020/5-A	Method Blank	Total/NA	Solid	8021B	56020
MB 880-56064/5-A	Method Blank	Total/NA	Solid	8021B	56064
LCS 880-56020/1-A	Lab Control Sample	Total/NA	Solid	8021B	56020
LCSD 880-56020/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	56020
890-4836-2 MS	SS02	Total/NA	Solid	8021B	56020
890-4836-2 MSD	SS02	Total/NA	Solid	8021B	56020

Analysis Batch: 56211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	Total BTEX	
890-4836-2	SS02	Total/NA	Solid	Total BTEX	
890-4836-3	SS03	Total/NA	Solid	Total BTEX	
890-4836-4	SS04	Total/NA	Solid	Total BTEX	
890-4836-5	SS05	Total/NA	Solid	Total BTEX	
890-4836-6	SS06	Total/NA	Solid	Total BTEX	
890-4836-7	SS07	Total/NA	Solid	Total BTEX	
890-4836-8	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 56026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

GC Semi VOA (Continued)

Prep Batch: 56026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-2	SS02	Total/NA	Solid	8015NM Prep	
890-4836-3	SS03	Total/NA	Solid	8015NM Prep	
890-4836-4	SS04	Total/NA	Solid	8015NM Prep	
890-4836-5	SS05	Total/NA	Solid	8015NM Prep	
890-4836-6	SS06	Total/NA	Solid	8015NM Prep	
890-4836-7	SS07	Total/NA	Solid	8015NM Prep	
890-4836-8	SS08	Total/NA	Solid	8015NM Prep	
MB 880-56026/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-56026/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCS 880-56026/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4836-5 MS	SS05	Total/NA	Solid	8015NM Prep	
890-4836-5 MSD	SS05	Total/NA	Solid	8015NM Prep	

Analysis Batch: 56147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	8015B NM	56026
890-4836-2	SS02	Total/NA	Solid	8015B NM	56026
890-4836-3	SS03	Total/NA	Solid	8015B NM	56026
890-4836-4	SS04	Total/NA	Solid	8015B NM	56026
890-4836-5	SS05	Total/NA	Solid	8015B NM	56026
890-4836-6	SS06	Total/NA	Solid	8015B NM	56026
890-4836-7	SS07	Total/NA	Solid	8015B NM	56026
890-4836-8	SS08	Total/NA	Solid	8015B NM	56026
MB 880-56026/1-A	Method Blank	Total/NA	Solid	8015B NM	56026
LCS 880-56026/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	56026
LCS 880-56026/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	56026
890-4836-5 MS	SS05	Total/NA	Solid	8015B NM	56026
890-4836-5 MSD	SS05	Total/NA	Solid	8015B NM	56026

Analysis Batch: 56351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	8015 NM	
890-4836-2	SS02	Total/NA	Solid	8015 NM	
890-4836-3	SS03	Total/NA	Solid	8015 NM	
890-4836-4	SS04	Total/NA	Solid	8015 NM	
890-4836-5	SS05	Total/NA	Solid	8015 NM	
890-4836-6	SS06	Total/NA	Solid	8015 NM	
890-4836-7	SS07	Total/NA	Solid	8015 NM	
890-4836-8	SS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 55910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Soluble	Solid	DI Leach	
890-4836-2	SS02	Soluble	Solid	DI Leach	
890-4836-3	SS03	Soluble	Solid	DI Leach	
890-4836-4	SS04	Soluble	Solid	DI Leach	
890-4836-5	SS05	Soluble	Solid	DI Leach	
890-4836-6	SS06	Soluble	Solid	DI Leach	
890-4836-7	SS07	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
 SDG: 03C1558249

HPLC/IC (Continued)

Leach Batch: 55910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-8	SS08	Soluble	Solid	DI Leach	
MB 880-55910/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-55910/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-55910/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4836-1 MS	SS01	Soluble	Solid	DI Leach	
890-4836-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 56018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Soluble	Solid	300.0	55910
890-4836-2	SS02	Soluble	Solid	300.0	55910
890-4836-3	SS03	Soluble	Solid	300.0	55910
890-4836-4	SS04	Soluble	Solid	300.0	55910
890-4836-5	SS05	Soluble	Solid	300.0	55910
890-4836-6	SS06	Soluble	Solid	300.0	55910
890-4836-7	SS07	Soluble	Solid	300.0	55910
890-4836-8	SS08	Soluble	Solid	300.0	55910
MB 880-55910/1-A	Method Blank	Soluble	Solid	300.0	55910
LCS 880-55910/2-A	Lab Control Sample	Soluble	Solid	300.0	55910
LCSD 880-55910/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	55910
890-4836-1 MS	SS01	Soluble	Solid	300.0	55910
890-4836-1 MSD	SS01	Soluble	Solid	300.0	55910

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS01

Lab Sample ID: 890-4836-1

Date Collected: 06/19/23 09:25

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	56082	06/23/23 06:13	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	56147	06/23/23 17:58	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	56018	06/21/23 19:30	CH	EET MID

Client Sample ID: SS02

Lab Sample ID: 890-4836-2

Date Collected: 06/19/23 09:30

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 03:30	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 21:05	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	56018	06/21/23 19:48	CH	EET MID

Client Sample ID: SS03

Lab Sample ID: 890-4836-3

Date Collected: 06/19/23 09:35

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 03:50	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 20:19	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	56018	06/21/23 19:53	CH	EET MID

Client Sample ID: SS04

Lab Sample ID: 890-4836-4

Date Collected: 06/19/23 09:40

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	56082	06/23/23 06:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS04

Lab Sample ID: 890-4836-4

Date Collected: 06/19/23 09:40

Matrix: Solid

Date Received: 06/19/23 15:52

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			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	56147	06/23/23 18:22	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 19:59	CH	EET MID

Client Sample ID: SS05

Lab Sample ID: 890-4836-5

Date Collected: 06/19/23 09:55

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 04:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 12:14	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:05	CH	EET MID

Client Sample ID: SS06

Lab Sample ID: 890-4836-6

Date Collected: 06/19/23 10:00

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 04:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 13:22	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:23	CH	EET MID

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 04:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 13:45	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05

Matrix: Solid

Date Received: 06/19/23 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:28	CH	EET MID

Client Sample ID: SS08

Lab Sample ID: 890-4836-8

Date Collected: 06/19/23 10:10

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 05:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 14:08	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:34	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: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

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Method Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
 SDG: 03C1558249

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: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4836-1	SS01	Solid	06/19/23 09:25	06/19/23 15:52	0.5
890-4836-2	SS02	Solid	06/19/23 09:30	06/19/23 15:52	0.5
890-4836-3	SS03	Solid	06/19/23 09:35	06/19/23 15:52	0.5
890-4836-4	SS04	Solid	06/19/23 09:40	06/19/23 15:52	0.5
890-4836-5	SS05	Solid	06/19/23 09:55	06/19/23 15:52	0.5
890-4836-6	SS06	Solid	06/19/23 10:00	06/19/23 15:52	0.5
890-4836-7	SS07	Solid	06/19/23 10:05	06/19/23 15:52	0.5
890-4836-8	SS08	Solid	06/19/23 10:10	06/19/23 15:52	0.5

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Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager:	Ben Belli	Bill to: (if different)	Garrett Green
Company Name:	Ensolum	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Green St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-887-2946	Email:	Garrett.Green@ExxonMobil.com

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

Project Name:	Hat Mesa 32-2	Turn Around	Pres. Code
Project Number:	03C1558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location:	Connor Whitman	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: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Thermometer ID:	FW0021
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Correction Factor:	-0.2
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
S501	S	6/10/23	9:25	5'	G	1	CHLORIDES (EPA: 3000.0)		None: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC	Incident ID: NAPP2316046257
S502			9:30			1	TPH (8015)			Cost Center: 1148831001
S503			9:35			1	BTEX (8021)			AFE:
S504			9:40			1				
S505			9:55			1				
S506			10:00			1				
S507			10:05			1				
S508			10:12			1				



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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$3 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
<i>[Signature]</i>	<i>[Signature]</i>	6-19-23 15:52			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4836-1

SDG Number: 03C1558249

Login Number: 4836

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4836-1

SDG Number: 03C1558249

Login Number: 4836

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 06/21/23 10:52 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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum

601 N. Marienfeld St.
Suite 400

Midland, Texas 79701

Generated 7/31/2023 3:20:45 PM

JOB DESCRIPTION

Hat Mesa 32-2
SDG NUMBER 03C1558249

JOB NUMBER

890-4946-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



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
7/31/2023 3:20:45 PM

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

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Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-4946-1
SDG: 03C1558249

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Job ID: 890-4946-1

Laboratory: Eurofins Carlsbad

Narrative

**Job Narrative
890-4946-1**

Receipt

The samples were received on 7/14/2023 1:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH01 (890-4946-1), BH02 (890-4946-2), BH03 (890-4946-3) and BH04 (890-4946-4).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The CCV was biased high for gasoline range hydrocarbons. Another CCV was analyzed and acceptable within 12 hours; therefore, the data was qualified and reported.(CCV 880-58792/58)

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH01 (890-4946-1), BH02 (890-4946-2), BH03 (890-4946-3), BH04 (890-4946-4) and (MB 880-58406/1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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



Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH01

Lab Sample ID: 890-4946-1

Date Collected: 07/14/23 09:30

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 2

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		07/17/23 13:55	07/20/23 14:27	1
Toluene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 14:27	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 14:27	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		07/17/23 13:55	07/20/23 14:27	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 14:27	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		07/17/23 13:55	07/20/23 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	07/17/23 13:55	07/20/23 14:27	1
1,4-Difluorobenzene (Surr)	119		70 - 130	07/17/23 13:55	07/20/23 14:27	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	189		49.5	mg/Kg			07/31/23 16:01	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	<49.5	U	49.5	mg/Kg		07/25/23 13:16	07/31/23 04:34	1
Diesel Range Organics (Over C10-C28)	189		49.5	mg/Kg		07/25/23 13:16	07/31/23 04:34	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5	mg/Kg		07/25/23 13:16	07/31/23 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	147	S1+	70 - 130	07/25/23 13:16	07/31/23 04:34	1
o-Terphenyl	131	S1+	70 - 130	07/25/23 13:16	07/31/23 04:34	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6930		50.0	mg/Kg			07/17/23 20:04	10

Client Sample ID: BH02

Lab Sample ID: 890-4946-2

Date Collected: 07/14/23 10:00

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1.5

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		07/17/23 13:55	07/20/23 16:11	1
Toluene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 16:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 16:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		07/17/23 13:55	07/20/23 16:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 16:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		07/17/23 13:55	07/20/23 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	07/17/23 13:55	07/20/23 16:11	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH02

Lab Sample ID: 890-4946-2

Date Collected: 07/14/23 10:00

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	07/17/23 13:55	07/20/23 16:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	952		49.9	mg/Kg			07/31/23 16:01	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		07/25/23 13:16	07/31/23 04:13	1
Diesel Range Organics (Over C10-C28)	952		49.9	mg/Kg		07/25/23 13:16	07/31/23 04:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		07/25/23 13:16	07/31/23 04:13	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	134	S1+	70 - 130	07/25/23 13:16	07/31/23 04:13	1		
o-Terphenyl	121		70 - 130	07/25/23 13:16	07/31/23 04:13	1		

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17400		251	mg/Kg			07/17/23 20:09	50

Client Sample ID: BH03

Lab Sample ID: 890-4946-3

Date Collected: 07/14/23 10:10

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		07/17/23 13:55	07/20/23 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	07/17/23 13:55	07/20/23 16:46	1
1,4-Difluorobenzene (Surr)	111		70 - 130	07/17/23 13:55	07/20/23 16:46	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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	79.6		50.2	mg/Kg			07/31/23 16:01	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH03

Lab Sample ID: 890-4946-3

Date Collected: 07/14/23 10:10

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2	mg/Kg		07/25/23 13:16	07/31/23 04:55	1
Diesel Range Organics (Over C10-C28)	79.6		50.2	mg/Kg		07/25/23 13:16	07/31/23 04:55	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		07/25/23 13:16	07/31/23 04:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130			07/25/23 13:16	07/31/23 04:55	1
o-Terphenyl	127		70 - 130			07/25/23 13:16	07/31/23 04:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	931		4.99	mg/Kg			07/17/23 20:14	1

Client Sample ID: BH04

Lab Sample ID: 890-4946-4

Date Collected: 07/14/23 10:20

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			07/17/23 13:55	07/20/23 17:07	1
1,4-Difluorobenzene (Surr)	115		70 - 130			07/17/23 13:55	07/20/23 17:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2720		50.3	mg/Kg			07/31/23 16:01	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	<50.3	U	50.3	mg/Kg		07/25/23 13:16	07/31/23 03:52	1
Diesel Range Organics (Over C10-C28)	2720		50.3	mg/Kg		07/25/23 13:16	07/31/23 03:52	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		07/25/23 13:16	07/31/23 03:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130			07/25/23 13:16	07/31/23 03:52	1
o-Terphenyl	124		70 - 130			07/25/23 13:16	07/31/23 03:52	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH04

Lab Sample ID: 890-4946-4

Date Collected: 07/14/23 10:20

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.0		4.99	mg/Kg			07/17/23 20:19	1

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

Surrogate Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-30743-A-1-D MS	Matrix Spike	104	105
880-30743-A-1-E MSD	Matrix Spike Duplicate	112	104
890-4946-1	BH01	92	119
890-4946-2	BH02	102	106
890-4946-3	BH03	89	111
890-4946-4	BH04	99	115
LCS 880-57844/1-A	Lab Control Sample	95	100
LCS 880-57844/2-A	Lab Control Sample Dup	89	103
MB 880-57844/5-A	Method Blank	83	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-4946-1	BH01	147 S1+	131 S1+
890-4946-2	BH02	134 S1+	121
890-4946-3	BH03	135 S1+	127
890-4946-4	BH04	140 S1+	124
890-4951-A-12-F MS	Matrix Spike	113	93
890-4951-A-12-G MSD	Matrix Spike Duplicate	115	95
LCS 880-58406/2-A	Lab Control Sample	100	109
LCS 880-58406/3-A	Lab Control Sample Dup	100	107
MB 880-58406/1-A	Method Blank	162 S1+	155 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-57844/5-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57844

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/17/23 13:55	07/20/23 11:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	07/17/23 13:55	07/20/23 11:20	1
1,4-Difluorobenzene (Surr)	95		70 - 130	07/17/23 13:55	07/20/23 11:20	1

Lab Sample ID: LCS 880-57844/1-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1031		mg/Kg		103	70 - 130
Toluene	0.100	0.1080		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.09914		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1936		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09607		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-57844/2-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1039		mg/Kg		104	70 - 130	1	35
Toluene	0.100	0.1047		mg/Kg		105	70 - 130	3	35
Ethylbenzene	0.100	0.09470		mg/Kg		95	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1830		mg/Kg		91	70 - 130	6	35
o-Xylene	0.100	0.09070		mg/Kg		91	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-30743-A-1-D MS
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0998	0.1036		mg/Kg		104	70 - 130
Toluene	<0.00202	U	0.0998	0.1039		mg/Kg		104	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

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

Lab Sample ID: 880-30743-A-1-D MS
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00202	U	0.0998	0.09181		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1782		mg/Kg		89	70 - 130
o-Xylene	<0.00202	U	0.0998	0.09006		mg/Kg		90	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-30743-A-1-E MSD
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00202	U	0.0996	0.09653		mg/Kg		97	70 - 130	7	35
Toluene	<0.00202	U	0.0996	0.1066		mg/Kg		107	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0996	0.09743		mg/Kg		98	70 - 130	6	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1934		mg/Kg		97	70 - 130	8	35
o-Xylene	<0.00202	U	0.0996	0.09744		mg/Kg		97	70 - 130	8	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

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

Lab Sample ID: MB 880-58406/1-A
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58406

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/24/23 17:42	07/30/23 19:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/24/23 17:42	07/30/23 19:47	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/24/23 17:42	07/30/23 19:47	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	162	S1+	70 - 130	07/24/23 17:42	07/30/23 19:47	1
o-Terphenyl	155	S1+	70 - 130	07/24/23 17:42	07/30/23 19:47	1

Lab Sample ID: LCS 880-58406/2-A
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58406

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	869.2		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	938.4		mg/Kg		94	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

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

Lab Sample ID: LCS 880-58406/2-A
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58406

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	100		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-58406/3-A
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58406

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	864.3		mg/Kg		86	70 - 130	1	20	
Diesel Range Organics (Over C10-C28)	1000	921.7		mg/Kg		92	70 - 130	2	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	100		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-4951-A-12-F MS
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58406

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	748.0		mg/Kg		74	70 - 130	
Diesel Range Organics (Over C10-C28)	255		1010	1047		mg/Kg		79	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	113		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: 890-4951-A-12-G MSD
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 58406

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	755.1		mg/Kg		75	70 - 130	1
Diesel Range Organics (Over C10-C28)	255		1010	1061		mg/Kg		80	70 - 130	1

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	115		70 - 130
o-Terphenyl	95		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-57836/1-A
Matrix: Solid
Analysis Batch: 57909

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			07/17/23 17:55	1

Lab Sample ID: LCS 880-57836/2-A
Matrix: Solid
Analysis Batch: 57909

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	249.9		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-57836/3-A
Matrix: Solid
Analysis Batch: 57909

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	250.3		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-4943-A-1-B MS
Matrix: Solid
Analysis Batch: 57909

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	1470		1250	2771		mg/Kg		104	90 - 110

Lab Sample ID: 890-4943-A-1-C MSD
Matrix: Solid
Analysis Batch: 57909

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	1470		1250	2778		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-4943-A-11-B MS
Matrix: Solid
Analysis Batch: 57909

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	141		249	383.0		mg/Kg		97	90 - 110

Lab Sample ID: 890-4943-A-11-C MSD
Matrix: Solid
Analysis Batch: 57909

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	141		249	383.1		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
 SDG: 03C1558249

GC VOA

Prep Batch: 57844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	5035	
890-4946-2	BH02	Total/NA	Solid	5035	
890-4946-3	BH03	Total/NA	Solid	5035	
890-4946-4	BH04	Total/NA	Solid	5035	
MB 880-57844/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-57844/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-57844/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-30743-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-30743-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 58089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	8021B	57844
890-4946-2	BH02	Total/NA	Solid	8021B	57844
890-4946-3	BH03	Total/NA	Solid	8021B	57844
890-4946-4	BH04	Total/NA	Solid	8021B	57844
MB 880-57844/5-A	Method Blank	Total/NA	Solid	8021B	57844
LCS 880-57844/1-A	Lab Control Sample	Total/NA	Solid	8021B	57844
LCS 880-57844/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	57844
880-30743-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	57844
880-30743-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	57844

Analysis Batch: 58191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	Total BTEX	
890-4946-2	BH02	Total/NA	Solid	Total BTEX	
890-4946-3	BH03	Total/NA	Solid	Total BTEX	
890-4946-4	BH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 58406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	8015NM Prep	
890-4946-2	BH02	Total/NA	Solid	8015NM Prep	
890-4946-3	BH03	Total/NA	Solid	8015NM Prep	
890-4946-4	BH04	Total/NA	Solid	8015NM Prep	
MB 880-58406/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-58406/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCS 880-58406/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4951-A-12-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4951-A-12-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 58792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	8015B NM	58406
890-4946-2	BH02	Total/NA	Solid	8015B NM	58406
890-4946-3	BH03	Total/NA	Solid	8015B NM	58406
890-4946-4	BH04	Total/NA	Solid	8015B NM	58406
MB 880-58406/1-A	Method Blank	Total/NA	Solid	8015B NM	58406
LCS 880-58406/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	58406

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

GC Semi VOA (Continued)

Analysis Batch: 58792 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-58406/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	58406
890-4951-A-12-F MS	Matrix Spike	Total/NA	Solid	8015B NM	58406
890-4951-A-12-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	58406

Analysis Batch: 58921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	8015 NM	
890-4946-2	BH02	Total/NA	Solid	8015 NM	
890-4946-3	BH03	Total/NA	Solid	8015 NM	
890-4946-4	BH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 57836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Soluble	Solid	DI Leach	
890-4946-2	BH02	Soluble	Solid	DI Leach	
890-4946-3	BH03	Soluble	Solid	DI Leach	
890-4946-4	BH04	Soluble	Solid	DI Leach	
MB 880-57836/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-57836/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-57836/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4943-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4943-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-4943-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4943-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 57909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Soluble	Solid	300.0	57836
890-4946-2	BH02	Soluble	Solid	300.0	57836
890-4946-3	BH03	Soluble	Solid	300.0	57836
890-4946-4	BH04	Soluble	Solid	300.0	57836
MB 880-57836/1-A	Method Blank	Soluble	Solid	300.0	57836
LCS 880-57836/2-A	Lab Control Sample	Soluble	Solid	300.0	57836
LCSD 880-57836/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	57836
890-4943-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	57836
890-4943-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	57836
890-4943-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	57836
890-4943-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	57836

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH01

Lab Sample ID: 890-4946-1

Date Collected: 07/14/23 09:30

Matrix: Solid

Date Received: 07/14/23 13:00

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	57844	07/17/23 13:55	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 14:27	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58191	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58921	07/31/23 16:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	58406	07/25/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58792	07/31/23 04:34	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	57836	07/17/23 11:13	KS	EET MID
Soluble	Analysis	300.0		10			57909	07/17/23 20:04	CH	EET MID

Client Sample ID: BH02

Lab Sample ID: 890-4946-2

Date Collected: 07/14/23 10:00

Matrix: Solid

Date Received: 07/14/23 13:00

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	57844	07/17/23 13:55	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 16:11	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58191	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58921	07/31/23 16:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	58406	07/25/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58792	07/31/23 04:13	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	57836	07/17/23 11:13	KS	EET MID
Soluble	Analysis	300.0		50			57909	07/17/23 20:09	CH	EET MID

Client Sample ID: BH03

Lab Sample ID: 890-4946-3

Date Collected: 07/14/23 10:10

Matrix: Solid

Date Received: 07/14/23 13:00

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	57844	07/17/23 13:55	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 16:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58191	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58921	07/31/23 16:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	58406	07/25/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58792	07/31/23 04:55	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	57836	07/17/23 11:13	KS	EET MID
Soluble	Analysis	300.0		1			57909	07/17/23 20:14	CH	EET MID

Client Sample ID: BH04

Lab Sample ID: 890-4946-4

Date Collected: 07/14/23 10:20

Matrix: Solid

Date Received: 07/14/23 13:00

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	57844	07/17/23 13:55	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 17:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58191	07/21/23 08:26	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
 SDG: 03C1558249

Client Sample ID: BH04

Lab Sample ID: 890-4946-4

Date Collected: 07/14/23 10:20

Matrix: Solid

Date Received: 07/14/23 13:00

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			58921	07/31/23 16:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	58406	07/25/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58792	07/31/23 03:52	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	57836	07/17/23 11:13	KS	EET MID
Soluble	Analysis	300.0		1			57909	07/17/23 20:19	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

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	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

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Method Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

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: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4946-1	BH01	Solid	07/14/23 09:30	07/14/23 13:00	2
890-4946-2	BH02	Solid	07/14/23 10:00	07/14/23 13:00	1.5
890-4946-3	BH03	Solid	07/14/23 10:10	07/14/23 13:00	1
890-4946-4	BH04	Solid	07/14/23 10:20	07/14/23 13:00	1

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Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Bellill	Bill to: (if different)	Garrett Green
Company Name:	ENSOLUM, LLC	Company Name:	XTO ENERGY
Address:	3122 National Parks Hwy	Address:	3104 E. Green St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	Garrett.Green@XTOEnergy.com

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

Project Name:	Hat Mesa 32-2	Turn Around	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Pres. Code	
Project Number:	03C1558249	Due Date:	5 days			
Project Location:	32.53001-103.098500	TAT starts the day received by the lab, if received by 4:30pm				
Sampler's Name:	Marihana O Dell	Wet/Let:	Wet	Yes No		
PO #:		Thermometer ID:	77777777	Yes No		
SAMPLE RECEIPT	Temp Blank:	Correction Factor:	-0.0	Yes No		
Samples Received Intact:	Yes No	Temperature Reading:	2.2	Yes No		
Cooler Custody Seals:	Yes No	Corrected Temperature:	2.0	Yes No		
Sample Custody Seals:	Yes No					
Total Containers:						



890-4946 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
BH01	S	7/14/23	9:30	2'	G	1	Chlorides		None: NO DI Water: H ₂ O	Incident #:
BH02	S		10:00	15'	G	1	TPH		Cool: Cool MeOH: Me	MAPP 2310040257
BH03	S		10:10	1'	G	1	BTEX		HCl: HC HNO ₃ : HN	COST Center:
BH04	S		10:20	1'	G	1			H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP	1148831001
<p>Ben Bellill bbellill@ensolum.com API: 30-015-34819</p>										

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texs 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
<i>M. O'Dell</i>	<i>Joe Fry</i>	7-14-23 1300			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4946-1

SDG Number: 03C1558249

Login Number: 4946

List Source: Eurofins Carlsbad

List Number: 1

Creator: Clifton, Cloe

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	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4946-1

SDG Number: 03C1558249

Login Number: 4946

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 07/17/23 10:06 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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum

601 N. Marienfeld St.
Suite 400

Midland, Texas 79701

Generated 11/13/2023 12:38:26 PM

JOB DESCRIPTION

Hat Mesa 32-2

JOB NUMBER

890-5563-1



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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11/13/2023 12:38:26 PM

Authorized for release by
Jessica Kramer, Project Manager
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Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-5563-1

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Eurofins Carlsbad

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Job ID: 890-5563-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-5563-1**

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/3/2023 8:35 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 3.2°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-5563-1), FS02 (890-5563-2), FS03 (890-5563-3), FS04 (890-5563-4), FS05 (890-5563-5), FS06 (890-5563-6), FS07 (890-5563-7), FS08 (890-5563-8), SW01 (890-5563-9), SW02 (890-5563-10), SW03 (890-5563-11), SW04 (890-5563-12), FS09 (890-5563-13), FS10 (890-5563-14), FS11 (890-5563-15), FS12 (890-5563-16), FS13 (890-5563-17), FS14 (890-5563-18), FS15 (890-5563-19), FS16 (890-5563-20), FS17 (890-5563-21), FS18 (890-5563-22), FS19 (890-5563-23) and SW05 (890-5563-24).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66261 and analytical batch 880-66350 was outside the control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS03 (890-5563-3), FS04 (890-5563-4), FS06 (890-5563-6), FS08 (890-5563-8), SW01 (890-5563-9), SW02 (890-5563-10), SW04 (890-5563-12), FS09 (890-5563-13), FS10 (890-5563-14), FS11 (890-5563-15), FS12 (890-5563-16), FS13 (890-5563-17) and (890-5563-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-66320 and analytical batch 880-66350 recovered outside control limits for the following analytes: m-Xylene & p-Xylene. Since only an acceptable LCS or LCSD is required per the method, the LCSD shows recovery for the batch and the data has been qualified and reported.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-66320 and analytical batch 880-66350 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS17 (890-5563-21), FS18 (890-5563-22), FS19 (890-5563-23), (CCV 880-66703/33), (CCV 880-66703/82) and (890-5569-A-21-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-66435 and analytical batch 880-66703 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-5569-A-21-D MS) and (890-5569-A-21-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS15 (890-5563-19) and FS16 (890-5563-20).

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Job ID: 890-5563-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66313 and analytical batch 880-66344 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS01 (890-5563-1), FS02 (890-5563-2), FS03 (890-5563-3), FS04 (890-5563-4), FS06 (890-5563-6), FS07 (890-5563-7) and FS08 (890-5563-8). 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: SW01 (890-5563-9), SW03 (890-5563-11), FS09 (890-5563-13), FS10 (890-5563-14), FS11 (890-5563-15), FS12 (890-5563-16) and FS14 (890-5563-18). 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: (CCV 880-66344/20), (CCV 880-66344/31), (CCV 880-66344/5), (CCV 880-66344/57) and (CCV 880-66344/58). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66315 and analytical batch 880-66346 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS15 (890-5563-19), FS16 (890-5563-20), FS17 (890-5563-21), FS18 (890-5563-22), FS19 (890-5563-23), SW05 (890-5563-24), (890-5563-A-19-B MS) and (890-5563-A-19-C MSD). 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: (CCV 880-66346/20) and (CCV 880-66346/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-66315 and analytical batch 880-66346 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS01

Lab Sample ID: 890-5563-1

Date Collected: 11/01/23 09:20

Matrix: Solid

Date Received: 11/03/23 08:35

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	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/07/23 22:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	11/06/23 17:11	11/07/23 22:03	1
1,4-Difluorobenzene (Surr)	91		70 - 130	11/06/23 17:11	11/07/23 22:03	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/07/23 22:03	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			11/07/23 13:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		11/06/23 16:26	11/07/23 13:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/06/23 16:26	11/07/23 13:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/06/23 16:26	11/07/23 13:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	11/06/23 16:26	11/07/23 13:27	1
o-Terphenyl	125		70 - 130	11/06/23 16:26	11/07/23 13:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		5.02	mg/Kg			11/07/23 23:15	1

Client Sample ID: FS02

Lab Sample ID: 890-5563-2

Date Collected: 11/01/23 09:25

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 22:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:24	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	mg/Kg		11/06/23 17:11	11/07/23 22:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:24	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/06/23 17:11	11/07/23 22:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	11/06/23 17:11	11/07/23 22:24	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS02

Lab Sample ID: 890-5563-2

Date Collected: 11/01/23 09:25

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	72		70 - 130	11/06/23 17:11	11/07/23 22:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/07/23 22:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/07/23 13:49	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	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 13:49	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 13:49	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	11/06/23 16:26	11/07/23 13:49	1
o-Terphenyl	127		70 - 130	11/06/23 16:26	11/07/23 13:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.5		5.02	mg/Kg			11/07/23 23:30	1

Client Sample ID: FS03

Lab Sample ID: 890-5563-3

Date Collected: 11/01/23 09:30

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 22:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 22:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 22:44	1
m-Xylene & p-Xylene	<0.00398	U*	0.00398	mg/Kg		11/06/23 17:11	11/07/23 22:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 22:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/07/23 22:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	11/06/23 17:11	11/07/23 22:44	1
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130	11/06/23 17:11	11/07/23 22:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/07/23 22:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	67.6		49.7	mg/Kg			11/07/23 14:11	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS03

Lab Sample ID: 890-5563-3

Date Collected: 11/01/23 09:30

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 16:26	11/07/23 14:11	1
Diesel Range Organics (Over C10-C28)	67.6		49.7	mg/Kg		11/06/23 16:26	11/07/23 14:11	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 14:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	154	S1+	70 - 130			11/06/23 16:26	11/07/23 14:11	1
o-Terphenyl	150	S1+	70 - 130			11/06/23 16:26	11/07/23 14:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	115		4.96	mg/Kg			11/07/23 23:36	1

Client Sample ID: FS04

Lab Sample ID: 890-5563-4

Date Collected: 11/01/23 09:35

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 23:05	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
m-Xylene & p-Xylene	<0.00398	U *	0.00398	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130			11/06/23 17:11	11/07/23 23:05	1
1,4-Difluorobenzene (Surr)	52	S1-	70 - 130			11/06/23 17:11	11/07/23 23:05	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/07/23 23:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	110		49.9	mg/Kg			11/07/23 14:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/06/23 16:26	11/07/23 14:32	1
Diesel Range Organics (Over C10-C28)	110		49.9	mg/Kg		11/06/23 16:26	11/07/23 14:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/06/23 16:26	11/07/23 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130			11/06/23 16:26	11/07/23 14:32	1
o-Terphenyl	122		70 - 130			11/06/23 16:26	11/07/23 14:32	1

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS04

Lab Sample ID: 890-5563-4

Date Collected: 11/01/23 09:35

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		4.97	mg/Kg			11/07/23 23:41	1

Client Sample ID: FS05

Lab Sample ID: 890-5563-5

Date Collected: 11/01/23 09:40

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 23:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130			11/06/23 17:11	11/07/23 23:25	1
1,4-Difluorobenzene (Surr)	81		70 - 130			11/06/23 17:11	11/07/23 23:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/07/23 23:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/07/23 14:55	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	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 14:55	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 14:55	1
Oll Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 14:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130			11/06/23 16:26	11/07/23 14:55	1
o-Terphenyl	118		70 - 130			11/06/23 16:26	11/07/23 14:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		4.95	mg/Kg			11/07/23 23:46	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS06

Lab Sample ID: 890-5563-6

Date Collected: 11/01/23 09:45

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 23:46	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
m-Xylene & p-Xylene	<0.00402	U **	0.00402	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130			11/06/23 17:11	11/07/23 23:46	1
1,4-Difluorobenzene (Surr)	56	S1-	70 - 130			11/06/23 17:11	11/07/23 23:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/07/23 23:46	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			11/07/23 15:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 15:17	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 15:17	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 15:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130			11/06/23 16:26	11/07/23 15:17	1
o-Terphenyl	131	S1+	70 - 130			11/06/23 16:26	11/07/23 15:17	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67.5		5.05	mg/Kg			11/08/23 00:02	1

Client Sample ID: FS07

Lab Sample ID: 890-5563-7

Date Collected: 11/01/23 09:50

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 00:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/06/23 17:11	11/08/23 00:06	1

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS07

Lab Sample ID: 890-5563-7

Date Collected: 11/01/23 09:50

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	71		70 - 130	11/06/23 17:11	11/08/23 00:06	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/08/23 00:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/07/23 15:38	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	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 15:38	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 15:38	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 15:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130	11/06/23 16:26	11/07/23 15:38	1
o-Terphenyl	139	S1+	70 - 130	11/06/23 16:26	11/07/23 15:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	143		5.03	mg/Kg			11/08/23 00:07	1

Client Sample ID: FS08

Lab Sample ID: 890-5563-8

Date Collected: 11/01/23 09:55

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 00:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:26	1
m-Xylene & p-Xylene	<0.00398	U*	0.00398	mg/Kg		11/06/23 17:11	11/08/23 00:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	11/06/23 17:11	11/08/23 00:26	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130	11/06/23 17:11	11/08/23 00:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/08/23 00:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.1		50.5	mg/Kg			11/07/23 16:00	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS08

Lab Sample ID: 890-5563-8

Date Collected: 11/01/23 09:55

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 16:00	1
Diesel Range Organics (Over C10-C28)	51.1		50.5	mg/Kg		11/06/23 16:26	11/07/23 16:00	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 16:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130			11/06/23 16:26	11/07/23 16:00	1
o-Terphenyl	136	S1+	70 - 130			11/06/23 16:26	11/07/23 16:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.3		5.04	mg/Kg			11/08/23 00:12	1

Client Sample ID: SW01

Lab Sample ID: 890-5563-9

Date Collected: 11/01/23 10:20

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 00:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
m-Xylene & p-Xylene	<0.00398	U *	0.00398	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/06/23 17:11	11/08/23 00:47	1
1,4-Difluorobenzene (Surr)	59	S1-	70 - 130			11/06/23 17:11	11/08/23 00:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/08/23 00:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/07/23 16:45	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	<50.4	U	50.4	mg/Kg		11/06/23 16:26	11/07/23 16:45	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/06/23 16:26	11/07/23 16:45	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/06/23 16:26	11/07/23 16:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130			11/06/23 16:26	11/07/23 16:45	1
o-Terphenyl	135	S1+	70 - 130			11/06/23 16:26	11/07/23 16:45	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW01

Lab Sample ID: 890-5563-9

Date Collected: 11/01/23 10:20

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.8		5.02	mg/Kg			11/08/23 00:17	1

Client Sample ID: SW02

Lab Sample ID: 890-5563-10

Date Collected: 11/01/23 10:30

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 01:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/06/23 17:11	11/08/23 01:07	1
1,4-Difluorobenzene (Surr)	55	S1-	70 - 130			11/06/23 17:11	11/08/23 01:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/08/23 01:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/07/23 17:08	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	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 17:08	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 17:08	1
Oll Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 17:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130			11/06/23 16:26	11/07/23 17:08	1
o-Terphenyl	121		70 - 130			11/06/23 16:26	11/07/23 17:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.9		4.99	mg/Kg			11/08/23 00:22	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW03

Lab Sample ID: 890-5563-11

Date Collected: 11/01/23 10:40

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
m-Xylene & p-Xylene	<0.00403	U **	0.00403	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/06/23 17:11	11/08/23 02:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	11/06/23 17:11	11/08/23 02:29	1
1,4-Difluorobenzene (Surr)	72		70 - 130	11/06/23 17:11	11/08/23 02:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/08/23 02:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	76.3		49.7	mg/Kg			11/07/23 17:30	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		11/06/23 16:26	11/07/23 17:30	1
Diesel Range Organics (Over C10-C28)	76.3		49.7	mg/Kg		11/06/23 16:26	11/07/23 17:30	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130	11/06/23 16:26	11/07/23 17:30	1
o-Terphenyl	137	S1+	70 - 130	11/06/23 16:26	11/07/23 17:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		4.97	mg/Kg			11/08/23 00:28	1

Client Sample ID: SW04

Lab Sample ID: 890-5563-12

Date Collected: 11/01/23 10:50

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 02:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 02:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 02:50	1
m-Xylene & p-Xylene	<0.00398	U **	0.00398	mg/Kg		11/06/23 17:11	11/08/23 02:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 02:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	11/06/23 17:11	11/08/23 02:50	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW04

Lab Sample ID: 890-5563-12

Date Collected: 11/01/23 10:50

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130	11/06/23 17:11	11/08/23 02:50	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			11/08/23 02:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	88.9		50.3	mg/Kg			11/07/23 17:53	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	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 17:53	1
Diesel Range Organics (Over C10-C28)	88.9		50.3	mg/Kg		11/06/23 16:26	11/07/23 17:53	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 17:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	11/06/23 16:26	11/07/23 17:53	1
o-Terphenyl	124		70 - 130	11/06/23 16:26	11/07/23 17:53	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		5.05	mg/Kg			11/08/23 00:43	1

Client Sample ID: FS09

Lab Sample ID: 890-5563-13

Date Collected: 11/02/23 11:30

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 03:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 03:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 03:10	1
m-Xylene & p-Xylene	<0.00398	U*	0.00398	mg/Kg		11/06/23 17:11	11/08/23 03:10	1
o-Xylene	0.00223		0.00199	mg/Kg		11/06/23 17:11	11/08/23 03:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 03:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	11/06/23 17:11	11/08/23 03:10	1
1,4-Difluorobenzene (Surr)	54	S1-	70 - 130	11/06/23 17:11	11/08/23 03:10	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			11/08/23 03:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/07/23 18:14	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS09

Lab Sample ID: 890-5563-13

Date Collected: 11/02/23 11:30

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 18:14	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 18:14	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 18:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	160	S1+	70 - 130			11/06/23 16:26	11/07/23 18:14	1
o-Terphenyl	148	S1+	70 - 130			11/06/23 16:26	11/07/23 18:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		4.97	mg/Kg			11/08/23 00:48	1

Client Sample ID: FS10

Lab Sample ID: 890-5563-14

Date Collected: 11/02/23 11:35

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 03:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
m-Xylene & p-Xylene	<0.00399	U *	0.00399	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			11/06/23 17:11	11/08/23 03:31	1
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130			11/06/23 17:11	11/08/23 03:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/08/23 03:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/07/23 18:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 18:36	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 18:36	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 18:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130			11/06/23 16:26	11/07/23 18:36	1
o-Terphenyl	129		70 - 130			11/06/23 16:26	11/07/23 18:36	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS10

Lab Sample ID: 890-5563-14

Date Collected: 11/02/23 11:35

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		5.05	mg/Kg			11/08/23 01:04	1

Client Sample ID: FS11

Lab Sample ID: 890-5563-15

Date Collected: 11/02/23 11:40

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 03:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130			11/06/23 17:11	11/08/23 03:51	1
1,4-Difluorobenzene (Surr)	93		70 - 130			11/06/23 17:11	11/08/23 03:51	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/08/23 03:51	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			11/07/23 18:57	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	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 18:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 18:57	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 18:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	152	S1+	70 - 130			11/06/23 16:26	11/07/23 18:57	1
o-Terphenyl	142	S1+	70 - 130			11/06/23 16:26	11/07/23 18:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	108		5.00	mg/Kg			11/08/23 01:09	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS12

Lab Sample ID: 890-5563-16

Date Collected: 11/02/23 12:25

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 04:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:12	1
m-Xylene & p-Xylene	<0.00400	U **	0.00400	mg/Kg		11/06/23 17:11	11/08/23 04:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/06/23 17:11	11/08/23 04:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	11/06/23 17:11	11/08/23 04:12	1
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130	11/06/23 17:11	11/08/23 04:12	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			11/08/23 04:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	91.5		49.9	mg/Kg			11/07/23 19:19	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		11/06/23 16:26	11/07/23 19:19	1
Diesel Range Organics (Over C10-C28)	91.5		49.9	mg/Kg		11/06/23 16:26	11/07/23 19:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/06/23 16:26	11/07/23 19:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	11/06/23 16:26	11/07/23 19:19	1
o-Terphenyl	127		70 - 130	11/06/23 16:26	11/07/23 19:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	105		5.05	mg/Kg			11/08/23 01:14	1

Client Sample ID: FS13

Lab Sample ID: 890-5563-17

Date Collected: 11/02/23 12:30

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 04:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:32	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		11/06/23 17:11	11/08/23 04:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:32	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/08/23 04:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	11/06/23 17:11	11/08/23 04:32	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS13

Lab Sample ID: 890-5563-17

Date Collected: 11/02/23 12:30

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	54	S1-	70 - 130	11/06/23 17:11	11/08/23 04:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/08/23 04:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	70.8		50.2	mg/Kg			11/07/23 19:40	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	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 19:40	1
Diesel Range Organics (Over C10-C28)	70.8		50.2	mg/Kg		11/06/23 16:26	11/07/23 19:40	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	11/06/23 16:26	11/07/23 19:40	1
o-Terphenyl	113		70 - 130	11/06/23 16:26	11/07/23 19:40	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	132		4.99	mg/Kg			11/08/23 01:20	1

Client Sample ID: FS14

Lab Sample ID: 890-5563-18

Date Collected: 11/02/23 12:35

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 04:53	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/08/23 04:53	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/08/23 04:53	1
m-Xylene & p-Xylene	<0.00402	U*	0.00402	mg/Kg		11/06/23 17:11	11/08/23 04:53	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/08/23 04:53	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/06/23 17:11	11/08/23 04:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/06/23 17:11	11/08/23 04:53	1
1,4-Difluorobenzene (Surr)	77		70 - 130	11/06/23 17:11	11/08/23 04:53	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/08/23 04:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			11/07/23 20:02	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS14

Lab Sample ID: 890-5563-18

Date Collected: 11/02/23 12:35

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 20:02	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 20:02	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 20:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	139	S1+	70 - 130			11/06/23 16:26	11/07/23 20:02	1
o-Terphenyl	130		70 - 130			11/06/23 16:26	11/07/23 20:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	187		5.01	mg/Kg			11/08/23 01:25	1

Client Sample ID: FS15

Lab Sample ID: 890-5563-19

Date Collected: 11/02/23 12:40

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 05:13	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
m-Xylene & p-Xylene	<0.00398	U *	0.00398	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/06/23 17:11	11/08/23 05:13	1
1,4-Difluorobenzene (Surr)	63	S1-	70 - 130			11/06/23 17:11	11/08/23 05:13	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/08/23 05:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.3		50.5	mg/Kg			11/07/23 11:59	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	<50.5	U	50.5	mg/Kg		11/06/23 16:30	11/07/23 11:59	1
Diesel Range Organics (Over C10-C28)	56.3	*1	50.5	mg/Kg		11/06/23 16:30	11/07/23 11:59	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/06/23 16:30	11/07/23 11:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130			11/06/23 16:30	11/07/23 11:59	1
o-Terphenyl	160	S1+	70 - 130			11/06/23 16:30	11/07/23 11:59	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS15

Lab Sample ID: 890-5563-19

Date Collected: 11/02/23 12:40

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	236		5.02	mg/Kg			11/08/23 01:30	1

Client Sample ID: FS16

Lab Sample ID: 890-5563-20

Date Collected: 11/02/23 12:45

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 05:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
m-Xylene & p-Xylene	<0.00398	U **	0.00398	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			11/06/23 17:11	11/08/23 05:33	1
1,4-Difluorobenzene (Surr)	52	S1-	70 - 130			11/06/23 17:11	11/08/23 05:33	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/08/23 05:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	231		49.7	mg/Kg			11/07/23 13:05	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		11/06/23 16:30	11/07/23 13:05	1
Diesel Range Organics (Over C10-C28)	231	*1	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:05	1
Oll Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130			11/06/23 16:30	11/07/23 13:05	1
o-Terphenyl	167	S1+	70 - 130			11/06/23 16:30	11/07/23 13:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		4.95	mg/Kg			11/08/23 01:35	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS17

Lab Sample ID: 890-5563-21

Date Collected: 11/02/23 12:50

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/08/23 12:08	11/12/23 02:11	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/08/23 12:08	11/12/23 02:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/08/23 12:08	11/12/23 02:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/08/23 12:08	11/12/23 02:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/08/23 12:08	11/12/23 02:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/08/23 12:08	11/12/23 02:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	11/08/23 12:08	11/12/23 02:11	1
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130	11/08/23 12:08	11/12/23 02:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/12/23 02:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	187		49.7	mg/Kg			11/07/23 13:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:27	1
Diesel Range Organics (Over C10-C28)	187	*1	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:27	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	159	S1+	70 - 130	11/06/23 16:30	11/07/23 13:27	1
o-Terphenyl	180	S1+	70 - 130	11/06/23 16:30	11/07/23 13:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		5.00	mg/Kg			11/08/23 08:22	1

Client Sample ID: FS18

Lab Sample ID: 890-5563-22

Date Collected: 11/02/23 12:55

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/08/23 12:02	11/12/23 02:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/08/23 12:02	11/12/23 02:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/08/23 12:02	11/12/23 02:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/08/23 12:02	11/12/23 02:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/08/23 12:02	11/12/23 02:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/08/23 12:02	11/12/23 02:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130	11/08/23 12:02	11/12/23 02:37	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS18

Lab Sample ID: 890-5563-22

Date Collected: 11/02/23 12:55

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	11/08/23 12:02	11/12/23 02:37	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/12/23 02:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	114		50.4	mg/Kg			11/07/23 13:49	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	<50.4	U	50.4	mg/Kg		11/06/23 16:30	11/07/23 13:49	1
Diesel Range Organics (Over C10-C28)	114	*1	50.4	mg/Kg		11/06/23 16:30	11/07/23 13:49	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/06/23 16:30	11/07/23 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	150	S1+	70 - 130	11/06/23 16:30	11/07/23 13:49	1
o-Terphenyl	172	S1+	70 - 130	11/06/23 16:30	11/07/23 13:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88.5		5.00	mg/Kg			11/08/23 08:38	1

Client Sample ID: FS19

Lab Sample ID: 890-5563-23

Date Collected: 11/02/23 13:00

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/08/23 12:08	11/12/23 03:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:08	11/12/23 03:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:08	11/12/23 03:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/08/23 12:08	11/12/23 03:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:08	11/12/23 03:03	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/08/23 12:08	11/12/23 03:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130	11/08/23 12:08	11/12/23 03:03	1
1,4-Difluorobenzene (Surr)	107		70 - 130	11/08/23 12:08	11/12/23 03:03	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/12/23 03:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	104		49.8	mg/Kg			11/07/23 14:11	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS19

Lab Sample ID: 890-5563-23

Date Collected: 11/02/23 13:00

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 16:30	11/07/23 14:11	1
Diesel Range Organics (Over C10-C28)	104	*1	49.8	mg/Kg		11/06/23 16:30	11/07/23 14:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/06/23 16:30	11/07/23 14:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130			11/06/23 16:30	11/07/23 14:11	1
o-Terphenyl	154	S1+	70 - 130			11/06/23 16:30	11/07/23 14:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.4		5.02	mg/Kg			11/08/23 08:43	1

Client Sample ID: SW05

Lab Sample ID: 890-5563-24

Date Collected: 11/02/23 14:00

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-3

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		11/08/23 12:02	11/12/23 03:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130			11/08/23 12:02	11/12/23 03:30	1
1,4-Difluorobenzene (Surr)	73		70 - 130			11/08/23 12:02	11/12/23 03:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/12/23 03:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	149		49.6	mg/Kg			11/07/23 14:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		11/06/23 16:30	11/07/23 14:32	1
Diesel Range Organics (Over C10-C28)	149	*1	49.6	mg/Kg		11/06/23 16:30	11/07/23 14:32	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/06/23 16:30	11/07/23 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	147	S1+	70 - 130			11/06/23 16:30	11/07/23 14:32	1
o-Terphenyl	167	S1+	70 - 130			11/06/23 16:30	11/07/23 14:32	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW05

Lab Sample ID: 890-5563-24

Date Collected: 11/02/23 14:00

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.0		5.02	mg/Kg			11/08/23 08:48	1

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

Surrogate Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-5563-1	FS01	77	91
890-5563-1 MS	FS01	123	110
890-5563-1 MSD	FS01	137 S1+	113
890-5563-2	FS02	74	72
890-5563-3	FS03	70	64 S1-
890-5563-4	FS04	80	52 S1-
890-5563-5	FS05	71	81
890-5563-6	FS06	88	56 S1-
890-5563-7	FS07	87	71
890-5563-8	FS08	87	66 S1-
890-5563-9	SW01	87	59 S1-
890-5563-10	SW02	87	55 S1-
890-5563-11	SW03	85	72
890-5563-12	SW04	86	66 S1-
890-5563-13	FS09	92	54 S1-
890-5563-14	FS10	90	67 S1-
890-5563-15	FS11	77	93
890-5563-16	FS12	85	64 S1-
890-5563-17	FS13	83	54 S1-
890-5563-18	FS14	88	77
890-5563-19	FS15	87	63 S1-
890-5563-20	FS16	90	52 S1-
890-5563-21	FS17	82	64 S1-
890-5563-22	FS18	164 S1+	90
890-5563-23	FS19	139 S1+	107
890-5563-24	SW05	130	73
890-5569-A-21-D MS	Matrix Spike	132 S1+	68 S1-
890-5569-A-21-E MSD	Matrix Spike Duplicate	153 S1+	89
LCS 880-66320/1-A	Lab Control Sample	125	120
LCS 880-66435/1-A	Lab Control Sample	113	83
LCSD 880-66320/2-A	Lab Control Sample Dup	128	118
LCSD 880-66435/2-A	Lab Control Sample Dup	124	75
MB 880-66261/5-A	Method Blank	69 S1-	99
MB 880-66320/5-A	Method Blank	72	80
MB 880-66434/5-A	Method Blank	81	79
MB 880-66435/5-A	Method Blank	76	71

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5563-1	FS01	133 S1+	125
890-5563-2	FS02	135 S1+	127
890-5563-3	FS03	154 S1+	150 S1+

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Surrogate Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5563-4	FS04	135 S1+	122
890-5563-5	FS05	127	118
890-5563-6	FS06	142 S1+	131 S1+
890-5563-7	FS07	144 S1+	139 S1+
890-5563-8	FS08	142 S1+	136 S1+
890-5563-9	SW01	145 S1+	135 S1+
890-5563-10	SW02	127	121
890-5563-11	SW03	144 S1+	137 S1+
890-5563-12	SW04	127	124
890-5563-13	FS09	160 S1+	148 S1+
890-5563-14	FS10	136 S1+	129
890-5563-15	FS11	152 S1+	142 S1+
890-5563-16	FS12	135 S1+	127
890-5563-17	FS13	125	113
890-5563-18	FS14	139 S1+	130
890-5563-19	FS15	135 S1+	160 S1+
890-5563-19 MS	FS15	132 S1+	131 S1+
890-5563-19 MSD	FS15	130	132 S1+
890-5563-20	FS16	145 S1+	167 S1+
890-5563-21	FS17	159 S1+	180 S1+
890-5563-22	FS18	150 S1+	172 S1+
890-5563-23	FS19	134 S1+	154 S1+
890-5563-24	SW05	147 S1+	167 S1+
890-5566-A-8-C MS	Matrix Spike	126	109
890-5566-A-8-D MSD	Matrix Spike Duplicate	127	110
LCS 880-66313/2-A	Lab Control Sample	105	114
LCS 880-66315/2-A	Lab Control Sample	86	105
LCSD 880-66313/3-A	Lab Control Sample Dup	90	97
LCSD 880-66315/3-A	Lab Control Sample Dup	98	118
MB 880-66313/1-A	Method Blank	246 S1+	245 S1+
MB 880-66315/1-A	Method Blank	243 S1+	301 S1+

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66261/5-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66261

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/06/23 11:26	11/07/23 11:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130	11/06/23 11:26	11/07/23 11:06	1
1,4-Difluorobenzene (Surr)	99		70 - 130	11/06/23 11:26	11/07/23 11:06	1

Lab Sample ID: MB 880-66320/5-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66320

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/06/23 17:11	11/07/23 21:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	11/06/23 17:11	11/07/23 21:42	1
1,4-Difluorobenzene (Surr)	80		70 - 130	11/06/23 17:11	11/07/23 21:42	1

Lab Sample ID: LCS 880-66320/1-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1223		mg/Kg		122	70 - 130
Toluene	0.100	0.1179		mg/Kg		118	70 - 130
Ethylbenzene	0.100	0.1234		mg/Kg		123	70 - 130
m-Xylene & p-Xylene	0.200	0.2621	*+	mg/Kg		131	70 - 130
o-Xylene	0.100	0.1253		mg/Kg		125	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

Lab Sample ID: LCSD 880-66320/2-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1070		mg/Kg		107	70 - 130	13	35

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: LCSD 880-66320/2-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Toluene	0.100	0.1060		mg/Kg		106	70 - 130	11	35
Ethylbenzene	0.100	0.1153		mg/Kg		115	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2471		mg/Kg		124	70 - 130	6	35
o-Xylene	0.100	0.1190		mg/Kg		119	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: 890-5563-1 MS
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0996	0.06658	F1	mg/Kg		67	70 - 130		
Toluene	<0.00200	U	0.0996	0.07324		mg/Kg		74	70 - 130		
Ethylbenzene	<0.00200	U	0.0996	0.08149		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00399	U **	0.199	0.1674		mg/Kg		84	70 - 130		
o-Xylene	<0.00200	U	0.0996	0.07977		mg/Kg		80	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-5563-1 MSD
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0994	0.07596		mg/Kg		76	70 - 130	13	35
Toluene	<0.00200	U	0.0994	0.08122		mg/Kg		82	70 - 130	10	35
Ethylbenzene	<0.00200	U	0.0994	0.09335		mg/Kg		94	70 - 130	14	35
m-Xylene & p-Xylene	<0.00399	U **	0.199	0.1936		mg/Kg		97	70 - 130	15	35
o-Xylene	<0.00200	U	0.0994	0.09287		mg/Kg		93	70 - 130	15	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: MB 880-66434/5-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66434

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/23 15:54	11/11/23 04:38	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: MB 880-66434/5-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66434

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130			11/07/23 15:54	11/11/23 04:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130			11/07/23 15:54	11/11/23 04:38	1

Lab Sample ID: MB 880-66435/5-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66435

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130			11/07/23 15:55	11/11/23 18:17	1
1,4-Difluorobenzene (Surr)	71		70 - 130			11/07/23 15:55	11/11/23 18:17	1

Lab Sample ID: LCS 880-66435/1-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66435

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	0.100	0.1094		mg/Kg		109	70 - 130
Toluene	0.100	0.1112		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1031		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.2001		mg/Kg		100	70 - 130
o-Xylene	0.100	0.1053		mg/Kg		105	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	113		70 - 130				
1,4-Difluorobenzene (Surr)	83		70 - 130				

Lab Sample ID: LCSD 880-66435/2-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66435

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.1110		mg/Kg		111	70 - 130	1	35
Toluene	0.100	0.1078		mg/Kg		108	70 - 130	3	35
Ethylbenzene	0.100	0.1151		mg/Kg		115	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.2296		mg/Kg		115	70 - 130	14	35
o-Xylene	0.100	0.1224		mg/Kg		122	70 - 130	15	35

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	75		70 - 130

Lab Sample ID: 890-5569-A-21-D MS
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66435

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.00201	U	0.101	0.08876		mg/Kg		88		70 - 130
Toluene	<0.00201	U F2 F1	0.101	0.07431		mg/Kg		74		70 - 130
Ethylbenzene	<0.00201	U F2 F1	0.101	0.07440		mg/Kg		74		70 - 130
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.202	0.1432		mg/Kg		71		70 - 130
o-Xylene	<0.00201	U F2 F1	0.101	0.09014		mg/Kg		89		70 - 130

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130

Lab Sample ID: 890-5569-A-21-E MSD
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66435

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						Limit	
Benzene	<0.00201	U	0.0996	0.07067		mg/Kg		71		70 - 130	23	35
Toluene	<0.00201	U F2 F1	0.0996	0.02247	F2 F1	mg/Kg		23		70 - 130	107	35
Ethylbenzene	<0.00201	U F2 F1	0.0996	0.02605	F2 F1	mg/Kg		26		70 - 130	96	35
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.199	0.05428	F2 F1	mg/Kg		27		70 - 130	90	35
o-Xylene	<0.00201	U F2 F1	0.0996	0.06237	F2 F1	mg/Kg		63		70 - 130	36	35

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	153	S1+	70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-66313/1-A
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66313

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 09:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 09:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 09:24	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	246	S1+	70 - 130	11/06/23 16:26	11/07/23 09:24	1
o-Terphenyl	245	S1+	70 - 130	11/06/23 16:26	11/07/23 09:24	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: LCS 880-66313/2-A
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	1009		mg/Kg		101	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	946.0		mg/Kg		95	70 - 130	
		LCS	LCS					
Surrogate		%Recovery	Qualifier	Limits				
1-Chlorooctane		105		70 - 130				
o-Terphenyl		114		70 - 130				

Lab Sample ID: LCSD 880-66313/3-A
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	873.7		mg/Kg		87	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	799.8		mg/Kg		80	70 - 130	17	20
		LCSD	LCSD						
Surrogate		%Recovery	Qualifier	Limits					
1-Chlorooctane		90		70 - 130					
o-Terphenyl		97		70 - 130					

Lab Sample ID: 890-5566-A-8-C MS
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	1233		mg/Kg		121	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1128		mg/Kg		111	70 - 130
		MS	MS						
Surrogate		%Recovery	Qualifier	Limits					
1-Chlorooctane		126		70 - 130					
o-Terphenyl		109		70 - 130					

Lab Sample ID: 890-5566-A-8-D MSD
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	1249		mg/Kg		123	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1143		mg/Kg		112	70 - 130	1	20
		MSD	MSD								
Surrogate		%Recovery	Qualifier	Limits							
1-Chlorooctane		127		70 - 130							

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: 890-5566-A-8-D MSD
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66313

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	110		70 - 130

Lab Sample ID: MB 880-66315/1-A
Matrix: Solid
Analysis Batch: 66346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66315

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/06/23 16:30	11/07/23 09:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/06/23 16:30	11/07/23 09:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/06/23 16:30	11/07/23 09:02	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>1</i> -Chlorooctane	243	S1+	70 - 130	11/06/23 16:30	11/07/23 09:02	1
<i>o</i> -Terphenyl	301	S1+	70 - 130	11/06/23 16:30	11/07/23 09:02	1

Lab Sample ID: LCS 880-66315/2-A
Matrix: Solid
Analysis Batch: 66346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66315

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	841.4		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	837.2		mg/Kg		84	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>1</i> -Chlorooctane	86		70 - 130
<i>o</i> -Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-66315/3-A
Matrix: Solid
Analysis Batch: 66346

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66315

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1028		mg/Kg		103	70 - 130	20	20
Diesel Range Organics (Over C10-C28)	1000	1036	*1	mg/Kg		104	70 - 130	21	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>1</i> -Chlorooctane	98		70 - 130
<i>o</i> -Terphenyl	118		70 - 130

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QC Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: 890-5563-19 MS
 Matrix: Solid
 Analysis Batch: 66346

Client Sample ID: FS15
 Prep Type: Total/NA
 Prep Batch: 66315

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	1010	937.0		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	56.3	*1	1010	1092		mg/Kg		103	70 - 130
		<i>MS</i>	<i>MS</i>						
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>						
1-Chlorooctane	132	S1+	70 - 130						
o-Terphenyl	131	S1+	70 - 130						

Lab Sample ID: 890-5563-19 MSD
 Matrix: Solid
 Analysis Batch: 66346

Client Sample ID: FS15
 Prep Type: Total/NA
 Prep Batch: 66315

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	1010	899.8		mg/Kg		89	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	56.3	*1	1010	1102		mg/Kg		103	70 - 130	1	20
		<i>MSD</i>	<i>MSD</i>								
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>								
1-Chlorooctane	130		70 - 130								
o-Terphenyl	132	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66491/1-A
 Matrix: Solid
 Analysis Batch: 66492

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			11/07/23 22:59	1

Lab Sample ID: LCS 880-66491/2-A
 Matrix: Solid
 Analysis Batch: 66492

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Chloride	250	263.2		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-66491/3-A
 Matrix: Solid
 Analysis Batch: 66492

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

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
Chloride	250	264.1		mg/Kg		106	90 - 110	0	20

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-5563-1 MS
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	101		251	363.4		mg/Kg		105	90 - 110

Lab Sample ID: 890-5563-1 MSD
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	101		251	355.3		mg/Kg		101	90 - 110	2	20

Lab Sample ID: 890-5563-11 MS
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: SW03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	109		249	370.7		mg/Kg		105	90 - 110

Lab Sample ID: 890-5563-11 MSD
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: SW03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	109		249	372.2		mg/Kg		106	90 - 110	0	20

Lab Sample ID: MB 880-66356/1-A
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/08/23 08:06	1

Lab Sample ID: LCS 880-66356/2-A
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	259.5		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-66356/3-A
Matrix: Solid
Analysis Batch: 66512

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	260.4		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-5563-21 MS
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: FS17
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	127		250	382.5		mg/Kg		102	90 - 110

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-5563-21 MSD
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: FS17
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	127		250	374.8		mg/Kg		99	90 - 110	2	20

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

QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC VOA

Prep Batch: 66261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66261/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 66320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	5035	
890-5563-2	FS02	Total/NA	Solid	5035	
890-5563-3	FS03	Total/NA	Solid	5035	
890-5563-4	FS04	Total/NA	Solid	5035	
890-5563-5	FS05	Total/NA	Solid	5035	
890-5563-6	FS06	Total/NA	Solid	5035	
890-5563-7	FS07	Total/NA	Solid	5035	
890-5563-8	FS08	Total/NA	Solid	5035	
890-5563-9	SW01	Total/NA	Solid	5035	
890-5563-10	SW02	Total/NA	Solid	5035	
890-5563-11	SW03	Total/NA	Solid	5035	
890-5563-12	SW04	Total/NA	Solid	5035	
890-5563-13	FS09	Total/NA	Solid	5035	
890-5563-14	FS10	Total/NA	Solid	5035	
890-5563-15	FS11	Total/NA	Solid	5035	
890-5563-16	FS12	Total/NA	Solid	5035	
890-5563-17	FS13	Total/NA	Solid	5035	
890-5563-18	FS14	Total/NA	Solid	5035	
890-5563-19	FS15	Total/NA	Solid	5035	
890-5563-20	FS16	Total/NA	Solid	5035	
MB 880-66320/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66320/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66320/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5563-1 MS	FS01	Total/NA	Solid	5035	
890-5563-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 66350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	8021B	66320
890-5563-2	FS02	Total/NA	Solid	8021B	66320
890-5563-3	FS03	Total/NA	Solid	8021B	66320
890-5563-4	FS04	Total/NA	Solid	8021B	66320
890-5563-5	FS05	Total/NA	Solid	8021B	66320
890-5563-6	FS06	Total/NA	Solid	8021B	66320
890-5563-7	FS07	Total/NA	Solid	8021B	66320
890-5563-8	FS08	Total/NA	Solid	8021B	66320
890-5563-9	SW01	Total/NA	Solid	8021B	66320
890-5563-10	SW02	Total/NA	Solid	8021B	66320
890-5563-11	SW03	Total/NA	Solid	8021B	66320
890-5563-12	SW04	Total/NA	Solid	8021B	66320
890-5563-13	FS09	Total/NA	Solid	8021B	66320
890-5563-14	FS10	Total/NA	Solid	8021B	66320
890-5563-15	FS11	Total/NA	Solid	8021B	66320
890-5563-16	FS12	Total/NA	Solid	8021B	66320
890-5563-17	FS13	Total/NA	Solid	8021B	66320
890-5563-18	FS14	Total/NA	Solid	8021B	66320
890-5563-19	FS15	Total/NA	Solid	8021B	66320

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC VOA (Continued)

Analysis Batch: 66350 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-20	FS16	Total/NA	Solid	8021B	66320
MB 880-66261/5-A	Method Blank	Total/NA	Solid	8021B	66261
MB 880-66320/5-A	Method Blank	Total/NA	Solid	8021B	66320
LCS 880-66320/1-A	Lab Control Sample	Total/NA	Solid	8021B	66320
LCSD 880-66320/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66320
890-5563-1 MS	FS01	Total/NA	Solid	8021B	66320
890-5563-1 MSD	FS01	Total/NA	Solid	8021B	66320

Prep Batch: 66434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66434/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 66435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21	FS17	Total/NA	Solid	5035	
890-5563-22	FS18	Total/NA	Solid	5035	
890-5563-23	FS19	Total/NA	Solid	5035	
890-5563-24	SW05	Total/NA	Solid	5035	
MB 880-66435/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66435/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66435/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5569-A-21-D MS	Matrix Spike	Total/NA	Solid	5035	
890-5569-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 66531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	Total BTEX	
890-5563-2	FS02	Total/NA	Solid	Total BTEX	
890-5563-3	FS03	Total/NA	Solid	Total BTEX	
890-5563-4	FS04	Total/NA	Solid	Total BTEX	
890-5563-5	FS05	Total/NA	Solid	Total BTEX	
890-5563-6	FS06	Total/NA	Solid	Total BTEX	
890-5563-7	FS07	Total/NA	Solid	Total BTEX	
890-5563-8	FS08	Total/NA	Solid	Total BTEX	
890-5563-9	SW01	Total/NA	Solid	Total BTEX	
890-5563-10	SW02	Total/NA	Solid	Total BTEX	
890-5563-11	SW03	Total/NA	Solid	Total BTEX	
890-5563-12	SW04	Total/NA	Solid	Total BTEX	
890-5563-13	FS09	Total/NA	Solid	Total BTEX	
890-5563-14	FS10	Total/NA	Solid	Total BTEX	
890-5563-15	FS11	Total/NA	Solid	Total BTEX	
890-5563-16	FS12	Total/NA	Solid	Total BTEX	
890-5563-17	FS13	Total/NA	Solid	Total BTEX	
890-5563-18	FS14	Total/NA	Solid	Total BTEX	
890-5563-19	FS15	Total/NA	Solid	Total BTEX	
890-5563-20	FS16	Total/NA	Solid	Total BTEX	
890-5563-21	FS17	Total/NA	Solid	Total BTEX	
890-5563-22	FS18	Total/NA	Solid	Total BTEX	
890-5563-23	FS19	Total/NA	Solid	Total BTEX	
890-5563-24	SW05	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC VOA

Analysis Batch: 66703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21	FS17	Total/NA	Solid	8021B	66435
890-5563-22	FS18	Total/NA	Solid	8021B	66435
890-5563-23	FS19	Total/NA	Solid	8021B	66435
890-5563-24	SW05	Total/NA	Solid	8021B	66435
MB 880-66434/5-A	Method Blank	Total/NA	Solid	8021B	66434
MB 880-66435/5-A	Method Blank	Total/NA	Solid	8021B	66435
LCS 880-66435/1-A	Lab Control Sample	Total/NA	Solid	8021B	66435
LCSD 880-66435/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66435
890-5569-A-21-D MS	Matrix Spike	Total/NA	Solid	8021B	66435
890-5569-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	66435

GC Semi VOA

Prep Batch: 66313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	8015NM Prep	
890-5563-2	FS02	Total/NA	Solid	8015NM Prep	
890-5563-3	FS03	Total/NA	Solid	8015NM Prep	
890-5563-4	FS04	Total/NA	Solid	8015NM Prep	
890-5563-5	FS05	Total/NA	Solid	8015NM Prep	
890-5563-6	FS06	Total/NA	Solid	8015NM Prep	
890-5563-7	FS07	Total/NA	Solid	8015NM Prep	
890-5563-8	FS08	Total/NA	Solid	8015NM Prep	
890-5563-9	SW01	Total/NA	Solid	8015NM Prep	
890-5563-10	SW02	Total/NA	Solid	8015NM Prep	
890-5563-11	SW03	Total/NA	Solid	8015NM Prep	
890-5563-12	SW04	Total/NA	Solid	8015NM Prep	
890-5563-13	FS09	Total/NA	Solid	8015NM Prep	
890-5563-14	FS10	Total/NA	Solid	8015NM Prep	
890-5563-15	FS11	Total/NA	Solid	8015NM Prep	
890-5563-16	FS12	Total/NA	Solid	8015NM Prep	
890-5563-17	FS13	Total/NA	Solid	8015NM Prep	
890-5563-18	FS14	Total/NA	Solid	8015NM Prep	
MB 880-66313/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66313/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66313/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5566-A-8-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5566-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 66315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-19	FS15	Total/NA	Solid	8015NM Prep	
890-5563-20	FS16	Total/NA	Solid	8015NM Prep	
890-5563-21	FS17	Total/NA	Solid	8015NM Prep	
890-5563-22	FS18	Total/NA	Solid	8015NM Prep	
890-5563-23	FS19	Total/NA	Solid	8015NM Prep	
890-5563-24	SW05	Total/NA	Solid	8015NM Prep	
MB 880-66315/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66315/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66315/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5563-19 MS	FS15	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC Semi VOA (Continued)

Prep Batch: 66315 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-19 MSD	FS15	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	8015B NM	66313
890-5563-2	FS02	Total/NA	Solid	8015B NM	66313
890-5563-3	FS03	Total/NA	Solid	8015B NM	66313
890-5563-4	FS04	Total/NA	Solid	8015B NM	66313
890-5563-5	FS05	Total/NA	Solid	8015B NM	66313
890-5563-6	FS06	Total/NA	Solid	8015B NM	66313
890-5563-7	FS07	Total/NA	Solid	8015B NM	66313
890-5563-8	FS08	Total/NA	Solid	8015B NM	66313
890-5563-9	SW01	Total/NA	Solid	8015B NM	66313
890-5563-10	SW02	Total/NA	Solid	8015B NM	66313
890-5563-11	SW03	Total/NA	Solid	8015B NM	66313
890-5563-12	SW04	Total/NA	Solid	8015B NM	66313
890-5563-13	FS09	Total/NA	Solid	8015B NM	66313
890-5563-14	FS10	Total/NA	Solid	8015B NM	66313
890-5563-15	FS11	Total/NA	Solid	8015B NM	66313
890-5563-16	FS12	Total/NA	Solid	8015B NM	66313
890-5563-17	FS13	Total/NA	Solid	8015B NM	66313
890-5563-18	FS14	Total/NA	Solid	8015B NM	66313
MB 880-66313/1-A	Method Blank	Total/NA	Solid	8015B NM	66313
LCS 880-66313/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66313
LCSD 880-66313/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66313
890-5566-A-8-C MS	Matrix Spike	Total/NA	Solid	8015B NM	66313
890-5566-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66313

Analysis Batch: 66346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-19	FS15	Total/NA	Solid	8015B NM	66315
890-5563-20	FS16	Total/NA	Solid	8015B NM	66315
890-5563-21	FS17	Total/NA	Solid	8015B NM	66315
890-5563-22	FS18	Total/NA	Solid	8015B NM	66315
890-5563-23	FS19	Total/NA	Solid	8015B NM	66315
890-5563-24	SW05	Total/NA	Solid	8015B NM	66315
MB 880-66315/1-A	Method Blank	Total/NA	Solid	8015B NM	66315
LCS 880-66315/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66315
LCSD 880-66315/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66315
890-5563-19 MS	FS15	Total/NA	Solid	8015B NM	66315
890-5563-19 MSD	FS15	Total/NA	Solid	8015B NM	66315

Analysis Batch: 66516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	8015 NM	
890-5563-2	FS02	Total/NA	Solid	8015 NM	
890-5563-3	FS03	Total/NA	Solid	8015 NM	
890-5563-4	FS04	Total/NA	Solid	8015 NM	
890-5563-5	FS05	Total/NA	Solid	8015 NM	
890-5563-6	FS06	Total/NA	Solid	8015 NM	
890-5563-7	FS07	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC Semi VOA (Continued)

Analysis Batch: 66516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-8	FS08	Total/NA	Solid	8015 NM	
890-5563-9	SW01	Total/NA	Solid	8015 NM	
890-5563-10	SW02	Total/NA	Solid	8015 NM	
890-5563-11	SW03	Total/NA	Solid	8015 NM	
890-5563-12	SW04	Total/NA	Solid	8015 NM	
890-5563-13	FS09	Total/NA	Solid	8015 NM	
890-5563-14	FS10	Total/NA	Solid	8015 NM	
890-5563-15	FS11	Total/NA	Solid	8015 NM	
890-5563-16	FS12	Total/NA	Solid	8015 NM	
890-5563-17	FS13	Total/NA	Solid	8015 NM	
890-5563-18	FS14	Total/NA	Solid	8015 NM	
890-5563-19	FS15	Total/NA	Solid	8015 NM	
890-5563-20	FS16	Total/NA	Solid	8015 NM	
890-5563-21	FS17	Total/NA	Solid	8015 NM	
890-5563-22	FS18	Total/NA	Solid	8015 NM	
890-5563-23	FS19	Total/NA	Solid	8015 NM	
890-5563-24	SW05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21	FS17	Soluble	Solid	DI Leach	
890-5563-22	FS18	Soluble	Solid	DI Leach	
890-5563-23	FS19	Soluble	Solid	DI Leach	
890-5563-24	SW05	Soluble	Solid	DI Leach	
MB 880-66356/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66356/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS D 880-66356/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5563-21 MS	FS17	Soluble	Solid	DI Leach	
890-5563-21 MSD	FS17	Soluble	Solid	DI Leach	

Leach Batch: 66491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Soluble	Solid	DI Leach	
890-5563-2	FS02	Soluble	Solid	DI Leach	
890-5563-3	FS03	Soluble	Solid	DI Leach	
890-5563-4	FS04	Soluble	Solid	DI Leach	
890-5563-5	FS05	Soluble	Solid	DI Leach	
890-5563-6	FS06	Soluble	Solid	DI Leach	
890-5563-7	FS07	Soluble	Solid	DI Leach	
890-5563-8	FS08	Soluble	Solid	DI Leach	
890-5563-9	SW01	Soluble	Solid	DI Leach	
890-5563-10	SW02	Soluble	Solid	DI Leach	
890-5563-11	SW03	Soluble	Solid	DI Leach	
890-5563-12	SW04	Soluble	Solid	DI Leach	
890-5563-13	FS09	Soluble	Solid	DI Leach	
890-5563-14	FS10	Soluble	Solid	DI Leach	
890-5563-15	FS11	Soluble	Solid	DI Leach	
890-5563-16	FS12	Soluble	Solid	DI Leach	
890-5563-17	FS13	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

HPLC/IC (Continued)

Leach Batch: 66491 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-18	FS14	Soluble	Solid	DI Leach	
890-5563-19	FS15	Soluble	Solid	DI Leach	
890-5563-20	FS16	Soluble	Solid	DI Leach	
MB 880-66491/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66491/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66491/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5563-1 MS	FS01	Soluble	Solid	DI Leach	
890-5563-1 MSD	FS01	Soluble	Solid	DI Leach	
890-5563-11 MS	SW03	Soluble	Solid	DI Leach	
890-5563-11 MSD	SW03	Soluble	Solid	DI Leach	

Analysis Batch: 66492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Soluble	Solid	300.0	66491
890-5563-2	FS02	Soluble	Solid	300.0	66491
890-5563-3	FS03	Soluble	Solid	300.0	66491
890-5563-4	FS04	Soluble	Solid	300.0	66491
890-5563-5	FS05	Soluble	Solid	300.0	66491
890-5563-6	FS06	Soluble	Solid	300.0	66491
890-5563-7	FS07	Soluble	Solid	300.0	66491
890-5563-8	FS08	Soluble	Solid	300.0	66491
890-5563-9	SW01	Soluble	Solid	300.0	66491
890-5563-10	SW02	Soluble	Solid	300.0	66491
890-5563-11	SW03	Soluble	Solid	300.0	66491
890-5563-12	SW04	Soluble	Solid	300.0	66491
890-5563-13	FS09	Soluble	Solid	300.0	66491
890-5563-14	FS10	Soluble	Solid	300.0	66491
890-5563-15	FS11	Soluble	Solid	300.0	66491
890-5563-16	FS12	Soluble	Solid	300.0	66491
890-5563-17	FS13	Soluble	Solid	300.0	66491
890-5563-18	FS14	Soluble	Solid	300.0	66491
890-5563-19	FS15	Soluble	Solid	300.0	66491
890-5563-20	FS16	Soluble	Solid	300.0	66491
MB 880-66491/1-A	Method Blank	Soluble	Solid	300.0	66491
LCS 880-66491/2-A	Lab Control Sample	Soluble	Solid	300.0	66491
LCSD 880-66491/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66491
890-5563-1 MS	FS01	Soluble	Solid	300.0	66491
890-5563-1 MSD	FS01	Soluble	Solid	300.0	66491
890-5563-11 MS	SW03	Soluble	Solid	300.0	66491
890-5563-11 MSD	SW03	Soluble	Solid	300.0	66491

Analysis Batch: 66512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21	FS17	Soluble	Solid	300.0	66356
890-5563-22	FS18	Soluble	Solid	300.0	66356
890-5563-23	FS19	Soluble	Solid	300.0	66356
890-5563-24	SW05	Soluble	Solid	300.0	66356
MB 880-66356/1-A	Method Blank	Soluble	Solid	300.0	66356
LCS 880-66356/2-A	Lab Control Sample	Soluble	Solid	300.0	66356
LCSD 880-66356/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66356
890-5563-21 MS	FS17	Soluble	Solid	300.0	66356

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

HPLC/IC (Continued)

Analysis Batch: 66512 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21 MSD	FS17	Soluble	Solid	300.0	66356

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

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS01

Lab Sample ID: 890-5563-1

Date Collected: 11/01/23 09:20

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 13:27	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:15	CH	EET MID

Client Sample ID: FS02

Lab Sample ID: 890-5563-2

Date Collected: 11/01/23 09:25

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 13:49	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:30	CH	EET MID

Client Sample ID: FS03

Lab Sample ID: 890-5563-3

Date Collected: 11/01/23 09:30

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 14:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 14:11	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:36	CH	EET MID

Client Sample ID: FS04

Lab Sample ID: 890-5563-4

Date Collected: 11/01/23 09:35

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 23:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 23:05	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS04

Lab Sample ID: 890-5563-4

Date Collected: 11/01/23 09:35

Matrix: Solid

Date Received: 11/03/23 08:35

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			66516	11/07/23 14:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 14:32	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:41	CH	EET MID

Client Sample ID: FS05

Lab Sample ID: 890-5563-5

Date Collected: 11/01/23 09:40

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 23:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 23:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 14:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 14:55	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:46	CH	EET MID

Client Sample ID: FS06

Lab Sample ID: 890-5563-6

Date Collected: 11/01/23 09:45

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 23:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 23:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 15:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 15:17	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:02	CH	EET MID

Client Sample ID: FS07

Lab Sample ID: 890-5563-7

Date Collected: 11/01/23 09:50

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 00:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 00:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 15:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 15:38	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS07

Lab Sample ID: 890-5563-7

Date Collected: 11/01/23 09:50

Matrix: Solid

Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:07	CH	EET MID

Client Sample ID: FS08

Lab Sample ID: 890-5563-8

Date Collected: 11/01/23 09:55

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 00:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 00:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 16:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 16:00	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:12	CH	EET MID

Client Sample ID: SW01

Lab Sample ID: 890-5563-9

Date Collected: 11/01/23 10:20

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 00:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 00:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 16:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 16:45	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:17	CH	EET MID

Client Sample ID: SW02

Lab Sample ID: 890-5563-10

Date Collected: 11/01/23 10:30

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 01:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 01:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:08	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:22	CH	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW03

Lab Sample ID: 890-5563-11

Date Collected: 11/01/23 10:40

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 02:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 02:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:30	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:28	CH	EET MID

Client Sample ID: SW04

Lab Sample ID: 890-5563-12

Date Collected: 11/01/23 10:50

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 02:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 02:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:53	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:53	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:43	CH	EET MID

Client Sample ID: FS09

Lab Sample ID: 890-5563-13

Date Collected: 11/02/23 11:30

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 03:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 03:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 18:14	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 18:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:48	CH	EET MID

Client Sample ID: FS10

Lab Sample ID: 890-5563-14

Date Collected: 11/02/23 11:35

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 03:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 03:31	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS10

Lab Sample ID: 890-5563-14

Date Collected: 11/02/23 11:35

Matrix: Solid

Date Received: 11/03/23 08:35

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			66516	11/07/23 18:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 18:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:04	CH	EET MID

Client Sample ID: FS11

Lab Sample ID: 890-5563-15

Date Collected: 11/02/23 11:40

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 03:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 03:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 18:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 18:57	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:09	CH	EET MID

Client Sample ID: FS12

Lab Sample ID: 890-5563-16

Date Collected: 11/02/23 12:25

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 04:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 04:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 19:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 19:19	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:14	CH	EET MID

Client Sample ID: FS13

Lab Sample ID: 890-5563-17

Date Collected: 11/02/23 12:30

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 04:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 04:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 19:40	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 19:40	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS13

Lab Sample ID: 890-5563-17

Date Collected: 11/02/23 12:30

Matrix: Solid

Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:20	CH	EET MID

Client Sample ID: FS14

Lab Sample ID: 890-5563-18

Date Collected: 11/02/23 12:35

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 04:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 04:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 20:02	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 20:02	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:25	CH	EET MID

Client Sample ID: FS15

Lab Sample ID: 890-5563-19

Date Collected: 11/02/23 12:40

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 05:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 05:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 11:59	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:30	CH	EET MID

Client Sample ID: FS16

Lab Sample ID: 890-5563-20

Date Collected: 11/02/23 12:45

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 05:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 05:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 13:05	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:35	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS17

Lab Sample ID: 890-5563-21

Date Collected: 11/02/23 12:50

Matrix: Solid

Date Received: 11/03/23 08:35

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	66435	11/08/23 12:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 02:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 02:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 13:27	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:22	CH	EET MID

Client Sample ID: FS18

Lab Sample ID: 890-5563-22

Date Collected: 11/02/23 12:55

Matrix: Solid

Date Received: 11/03/23 08:35

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	66435	11/08/23 12:02	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 02:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 02:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 13:49	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:38	CH	EET MID

Client Sample ID: FS19

Lab Sample ID: 890-5563-23

Date Collected: 11/02/23 13:00

Matrix: Solid

Date Received: 11/03/23 08:35

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	66435	11/08/23 12:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 03:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 03:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 14:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 14:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:43	CH	EET MID

Client Sample ID: SW05

Lab Sample ID: 890-5563-24

Date Collected: 11/02/23 14:00

Matrix: Solid

Date Received: 11/03/23 08:35

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	66435	11/08/23 12:02	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 03:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 03:30	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW05

Lab Sample ID: 890-5563-24

Date Collected: 11/02/23 14:00

Matrix: Solid

Date Received: 11/03/23 08:35

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			66516	11/07/23 14:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 14:32	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:48	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

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Method Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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: Hat Mesa 32-2

Job ID: 890-5563-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5563-1	FS01	Solid	11/01/23 09:20	11/03/23 08:35	4
890-5563-2	FS02	Solid	11/01/23 09:25	11/03/23 08:35	4
890-5563-3	FS03	Solid	11/01/23 09:30	11/03/23 08:35	4
890-5563-4	FS04	Solid	11/01/23 09:35	11/03/23 08:35	4
890-5563-5	FS05	Solid	11/01/23 09:40	11/03/23 08:35	4
890-5563-6	FS06	Solid	11/01/23 09:45	11/03/23 08:35	4
890-5563-7	FS07	Solid	11/01/23 09:50	11/03/23 08:35	4
890-5563-8	FS08	Solid	11/01/23 09:55	11/03/23 08:35	4
890-5563-9	SW01	Solid	11/01/23 10:20	11/03/23 08:35	0-4
890-5563-10	SW02	Solid	11/01/23 10:30	11/03/23 08:35	0-4
890-5563-11	SW03	Solid	11/01/23 10:40	11/03/23 08:35	0-4
890-5563-12	SW04	Solid	11/01/23 10:50	11/03/23 08:35	0-4
890-5563-13	FS09	Solid	11/02/23 11:30	11/03/23 08:35	4
890-5563-14	FS10	Solid	11/02/23 11:35	11/03/23 08:35	4
890-5563-15	FS11	Solid	11/02/23 11:40	11/03/23 08:35	4
890-5563-16	FS12	Solid	11/02/23 12:25	11/03/23 08:35	3
890-5563-17	FS13	Solid	11/02/23 12:30	11/03/23 08:35	3
890-5563-18	FS14	Solid	11/02/23 12:35	11/03/23 08:35	3
890-5563-19	FS15	Solid	11/02/23 12:40	11/03/23 08:35	3
890-5563-20	FS16	Solid	11/02/23 12:45	11/03/23 08:35	3
890-5563-21	FS17	Solid	11/02/23 12:50	11/03/23 08:35	3
890-5563-22	FS18	Solid	11/02/23 12:55	11/03/23 08:35	3
890-5563-23	FS19	Solid	11/02/23 13:00	11/03/23 08:35	3
890-5563-24	SW05	Solid	11/02/23 14:00	11/03/23 08:35	0-3

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Chain of Custody

Houston, TX (281) 240-2200 Dallas, TX (214) 902-0900
 Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199



Work Order No: _____

www.xenco.com Page 1 of 3

Project Manager: Ben Bellil	Bill to: (if different) Garrett Green
Company Name: Ensolum	Company Name: XTO Energy
Address: 3122 National Parks Hwy	Address: 3104 E. Green St.
City, State ZIP: Carlsbad, NM 88220	City, State ZIP: Carlsbad, NM 88220
Phone: 303-887-2946	Email: Garrett.Green@ExxonMobil.com

Project Name: Hat Mesa 32-2	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number: 03C1558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		<p>890-5563 Chain of Custody</p>	None: NO DI Water: H ₂ O
Project Location: Connor Whitman	Due Date: TAT starts the day received by the lab, if received by 4:30pm			Cool: Cool MeOH: Me
Sampler's Name: PO #:				HCL: HC HNO ₃ : HN
				H ₂ SO ₄ : H ₂ NaOH: Na
				H ₃ PO ₄ : HP
				NaHSO ₄ : NABIS
				Na ₂ S ₂ O ₃ : NaSO ₃
				Zn Acetate+NaOH: Zn
				NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Sample Comments
FS01	S	11/1/23	920	4	C	1	CHLORIDES (EPA: 3000.0)	Incident ID: nAPP231604257
FS02			925			1	TPH (8015)	Cost Center: 1148831001
FS03			930			1	BTEX (8021)	AFE:
FS04			935			1		
FS05			940			1		
FS06			945			1		
FS07			950			1		
FS08			955			1		
SW01			1020	0-4		1		
SW02			1030	0-4		1		

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$95.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	<i>Carole</i>	15:28 11/1/23			

Revised Date: 06/25/2020 Rev. 2020.2



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: Ben Bellill	Bill to: (if different) Garrett Green
Company Name: Ensolum	Company Name: XTO Energy
Address: 3122 National Parks Hwy	Address: 3104 E. Green St.
City, State ZIP: Carlsbad, NM 88220	City, State ZIP: Carlsbad, NM 88220
Phone: 303-887-2946	Email: Garrett.Green@ExxonMobil.com

Project Name: Hat Mesa 32-2	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number: 03C1558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			None: NO DI Water: H ₂ O
Project Location: Connor Whitman	Due Date: _____			Cool: Cool MeOH: Me
Sampler's Name: Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm			HCL: HC HNO ₃ : HN
PO #: _____				H ₂ SO ₄ : H ₂ NaOH: Na

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters		Sample Comments
							Temp Blank:	Wet Ice:	
SW03	S	11/1/23	1040	0-4	C	1			Incident ID: nAPP2316046257
SW04		↓	1050	0-4	C	1			
FJ09		11/2/23	1130	4		1			
FJ10			1135	4		1			
FJ11			1140	4		1			
FJ12			1235	3		1			Cost Center: 1148831001
FJ13			1230			1			AFE:
FJ14			1235			1			
FJ15			1240			1			
FJ16			1245			1			

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$95.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Garrett</i>	<i>Garrett</i>	15:20 11/2			
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5		6			

Revised Date: 09/25/2020 Rev 2020.2



Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5563-1

SDG Number:

Login Number: 5563

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	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5563-1

SDG Number:

Login Number: 5563

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/06/23 01:01 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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 11/13/2023 1:58:22 PM

JOB DESCRIPTION

Hat Mesa 32-2
 SDG NUMBER 32.53601,-103,688

JOB NUMBER

890-5567-1



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
11/13/2023 1:58:22 PM

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

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Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-5567-1
SDG: 32.53601,-103,688

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Job ID: 890-5567-1

Laboratory: Eurofins Carlsbad

Narrative

**Job Narrative
890-5567-1**

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/3/2023 2:50 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 3.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS20 (890-5567-1), FS21 (890-5567-2), FS22 (890-5567-3), FS23 (890-5567-4), FS24 (890-5567-5), FS25 (890-5567-6), FS26 (890-5567-7), FS27 (890-5567-8), FS28 (890-5567-9), FS29 (890-5567-10), FS30 (890-5567-11), FS31 (890-5567-12), FS32 (890-5567-13), FS33 (890-5567-14), FS34 (890-5567-15), FS35 (890-5567-16), FS36 (890-5567-17), SW06 (890-5567-18), SW07 (890-5567-19), SW08 (890-5567-20), SW09 (890-5567-21), SW10 (890-5567-22), FS37 (890-5567-23) and FS38 (890-5567-24).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66374 and 880-66532 and analytical batch 880-66684 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW08 (890-5567-20). 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.

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66452 and analytical batch 880-66469 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-66469/20), (CCV 880-66469/31) and (CCV 880-66469/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66453 and analytical batch 880-66473 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS22 (890-5567-3), FS23 (890-5567-4), FS24 (890-5567-5), FS25 (890-5567-6), FS26 (890-5567-7), FS27 (890-5567-8), FS28 (890-5567-9), FS29 (890-5567-10), FS30 (890-5567-11), FS31 (890-5567-12), FS32 (890-5567-13), FS33 (890-5567-14), FS34 (890-5567-15), FS35 (890-5567-16), FS36 (890-5567-17), SW06 (890-5567-18), SW07 (890-5567-19), SW08 (890-5567-20), SW09 (890-5567-21), SW10 (890-5567-22), (890-5567-A-3-D MS) and (890-5567-A-3-E MSD). 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: (CCV 880-66473/33), (CCV 880-66473/34) and (CCV 880-66473/5). Evidence of matrix interferences is not obvious.

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Job ID: 890-5567-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66454 and analytical batch 880-66475 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS37 (890-5567-23), FS38 (890-5567-24), (890-5567-A-23-D MS) and (890-5567-A-23-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-66475/5). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-66337 and analytical batch 880-66518 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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



Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS20

Lab Sample ID: 890-5567-1

Date Collected: 11/03/23 08:45

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 22:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 22:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 22:18	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/10/23 22:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 22:18	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/10/23 22:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	11/07/23 15:52	11/10/23 22:18	1
1,4-Difluorobenzene (Surr)	101		70 - 130	11/07/23 15:52	11/10/23 22:18	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/10/23 22:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/08/23 19:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/07/23 17:40	11/08/23 19:15	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/07/23 17:40	11/08/23 19:15	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/07/23 17:40	11/08/23 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/07/23 17:40	11/08/23 19:15	1
o-Terphenyl	105		70 - 130	11/07/23 17:40	11/08/23 19:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	412		4.98	mg/Kg			11/08/23 19:33	1

Client Sample ID: FS21

Lab Sample ID: 890-5567-2

Date Collected: 11/03/23 08:50

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 22:39	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:39	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:39	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/10/23 22:39	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:39	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/10/23 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/07/23 15:52	11/10/23 22:39	1
1,4-Difluorobenzene (Surr)	77		70 - 130	11/07/23 15:52	11/10/23 22:39	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS21

Lab Sample ID: 890-5567-2

Date Collected: 11/03/23 08:50

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/10/23 22:39	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			11/08/23 19:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/07/23 17:40	11/08/23 19:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/07/23 17:40	11/08/23 19:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/07/23 17:40	11/08/23 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/07/23 17:40	11/08/23 19:36	1
o-Terphenyl	104		70 - 130	11/07/23 17:40	11/08/23 19:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.1		5.05	mg/Kg			11/08/23 19:38	1

Client Sample ID: FS22

Lab Sample ID: 890-5567-3

Date Collected: 11/03/23 08:55

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 22:59	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:59	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/10/23 22:59	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:59	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/10/23 22:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	11/07/23 15:52	11/10/23 22:59	1
1,4-Difluorobenzene (Surr)	95		70 - 130	11/07/23 15:52	11/10/23 22:59	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/10/23 22:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/08/23 11:04	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	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 11:04	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 11:04	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS22

Lab Sample ID: 890-5567-3

Date Collected: 11/03/23 08:55

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 11:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	149	S1+	70 - 130			11/07/23 17:44	11/08/23 11:04	1
o-Terphenyl	131	S1+	70 - 130			11/07/23 17:44	11/08/23 11:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.2		5.04	mg/Kg			11/08/23 19:44	1

Client Sample ID: FS23

Lab Sample ID: 890-5567-4

Date Collected: 11/03/23 09:00

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 23:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			11/07/23 15:52	11/10/23 23:20	1
1,4-Difluorobenzene (Surr)	84		70 - 130			11/07/23 15:52	11/10/23 23:20	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/10/23 23:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/08/23 12:11	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	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 12:11	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 12:11	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 12:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	181	S1+	70 - 130			11/07/23 17:44	11/08/23 12:11	1
o-Terphenyl	155	S1+	70 - 130			11/07/23 17:44	11/08/23 12:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.2		5.02	mg/Kg			11/08/23 19:49	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS24

Lab Sample ID: 890-5567-5

Date Collected: 11/03/23 09:25

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 23:40	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/10/23 23:40	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/10/23 23:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/10/23 23:40	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/10/23 23:40	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/10/23 23:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	11/07/23 15:52	11/10/23 23:40	1
1,4-Difluorobenzene (Surr)	90		70 - 130	11/07/23 15:52	11/10/23 23:40	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			11/10/23 23:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/08/23 12:34	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	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 12:34	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 12:34	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	141	S1+	70 - 130	11/07/23 17:44	11/08/23 12:34	1
o-Terphenyl	125		70 - 130	11/07/23 17:44	11/08/23 12:34	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	439		5.01	mg/Kg			11/08/23 19:55	1

Client Sample ID: FS25

Lab Sample ID: 890-5567-6

Date Collected: 11/03/23 09:30

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 00:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:01	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 00:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:01	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	11/07/23 15:52	11/11/23 00:01	1
1,4-Difluorobenzene (Surr)	70		70 - 130	11/07/23 15:52	11/11/23 00:01	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS25

Lab Sample ID: 890-5567-6

Date Collected: 11/03/23 09:30

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/11/23 00:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			11/08/23 12:56	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	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 12:56	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 12:56	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 12:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	156	S1+	70 - 130	11/07/23 17:44	11/08/23 12:56	1
o-Terphenyl	137	S1+	70 - 130	11/07/23 17:44	11/08/23 12:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.1		5.01	mg/Kg			11/08/23 20:12	1

Client Sample ID: FS26

Lab Sample ID: 890-5567-7

Date Collected: 11/03/23 09:15

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 00:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 00:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:22	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 00:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/07/23 15:52	11/11/23 00:22	1
1,4-Difluorobenzene (Surr)	83		70 - 130	11/07/23 15:52	11/11/23 00:22	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/11/23 00:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/08/23 13:18	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	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 13:18	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 13:18	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS26

Lab Sample ID: 890-5567-7

Date Collected: 11/03/23 09:15

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 13:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	146	S1+	70 - 130			11/07/23 17:44	11/08/23 13:18	1
o-Terphenyl	129		70 - 130			11/07/23 17:44	11/08/23 13:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		5.04	mg/Kg			11/08/23 20:18	1

Client Sample ID: FS27

Lab Sample ID: 890-5567-8

Date Collected: 11/03/23 09:20

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 00:42	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			11/07/23 15:52	11/11/23 00:42	1
1,4-Difluorobenzene (Surr)	89		70 - 130			11/07/23 15:52	11/11/23 00:42	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/11/23 00:42	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			11/08/23 13:40	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		11/07/23 17:44	11/08/23 13:40	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		11/07/23 17:44	11/08/23 13:40	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/07/23 17:44	11/08/23 13:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	159	S1+	70 - 130			11/07/23 17:44	11/08/23 13:40	1
o-Terphenyl	138	S1+	70 - 130			11/07/23 17:44	11/08/23 13:40	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	138		5.05	mg/Kg			11/08/23 20:35	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS28

Lab Sample ID: 890-5567-9

Date Collected: 11/03/23 10:55

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 01:03	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 01:03	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 01:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 01:03	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 01:03	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 01:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	11/07/23 15:52	11/11/23 01:03	1
1,4-Difluorobenzene (Surr)	85		70 - 130	11/07/23 15:52	11/11/23 01:03	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/23 01:03	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			11/08/23 14:02	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		11/07/23 17:44	11/08/23 14:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 14:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 14:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	155	S1+	70 - 130	11/07/23 17:44	11/08/23 14:02	1
o-Terphenyl	139	S1+	70 - 130	11/07/23 17:44	11/08/23 14:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	133		4.99	mg/Kg			11/08/23 20:40	1

Client Sample ID: FS29

Lab Sample ID: 890-5567-10

Date Collected: 11/03/23 11:00

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 01:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 01:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 01:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 01:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 01:23	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 01:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	11/07/23 15:52	11/11/23 01:23	1
1,4-Difluorobenzene (Surr)	79		70 - 130	11/07/23 15:52	11/11/23 01:23	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS29

Lab Sample ID: 890-5567-10

Date Collected: 11/03/23 11:00

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/23 01:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			11/08/23 14:23	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	<50.2	U	50.2	mg/Kg		11/07/23 17:44	11/08/23 14:23	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		11/07/23 17:44	11/08/23 14:23	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		11/07/23 17:44	11/08/23 14:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	150	S1+	70 - 130	11/07/23 17:44	11/08/23 14:23	1
o-Terphenyl	132	S1+	70 - 130	11/07/23 17:44	11/08/23 14:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	259		4.98	mg/Kg			11/08/23 20:46	1

Client Sample ID: FS30

Lab Sample ID: 890-5567-11

Date Collected: 11/03/23 11:45

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 02:47	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 02:47	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 02:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/11/23 02:47	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 02:47	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/11/23 02:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	11/07/23 15:52	11/11/23 02:47	1
1,4-Difluorobenzene (Surr)	99		70 - 130	11/07/23 15:52	11/11/23 02:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/11/23 02:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/08/23 14:45	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	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 14:45	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 14:45	1

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103.688

Client Sample ID: FS30

Lab Sample ID: 890-5567-11

Date Collected: 11/03/23 11:45

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 14:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130			11/07/23 17:44	11/08/23 14:45	1
o-Terphenyl	121		70 - 130			11/07/23 17:44	11/08/23 14:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	362		5.05	mg/Kg			11/08/23 13:14	1

Client Sample ID: FS31

Lab Sample ID: 890-5567-12

Date Collected: 11/03/23 11:10

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 03:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			11/07/23 15:52	11/11/23 03:07	1
1,4-Difluorobenzene (Surr)	79		70 - 130			11/07/23 15:52	11/11/23 03:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/11/23 03:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/08/23 15:06	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	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 15:06	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 15:06	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	158	S1+	70 - 130			11/07/23 17:44	11/08/23 15:06	1
o-Terphenyl	143	S1+	70 - 130			11/07/23 17:44	11/08/23 15:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.5		5.05	mg/Kg			11/08/23 13:20	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS32

Lab Sample ID: 890-5567-13

Date Collected: 11/03/23 11:15

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 03:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 03:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	11/07/23 15:52	11/11/23 03:28	1
1,4-Difluorobenzene (Surr)	98		70 - 130	11/07/23 15:52	11/11/23 03:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/23 03:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5	mg/Kg			11/08/23 15:51	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	<49.5	U	49.5	mg/Kg		11/07/23 17:44	11/08/23 15:51	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5	mg/Kg		11/07/23 17:44	11/08/23 15:51	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5	mg/Kg		11/07/23 17:44	11/08/23 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	167	S1+	70 - 130	11/07/23 17:44	11/08/23 15:51	1
o-Terphenyl	145	S1+	70 - 130	11/07/23 17:44	11/08/23 15:51	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.9		5.04	mg/Kg			11/08/23 13:25	1

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 03:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 03:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 03:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/07/23 15:52	11/11/23 03:49	1
1,4-Difluorobenzene (Surr)	80		70 - 130	11/07/23 15:52	11/11/23 03:49	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/23 03:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/08/23 16:13	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	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 16:13	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 16:13	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	153	S1+	70 - 130	11/07/23 17:44	11/08/23 16:13	1
o-Terphenyl	137	S1+	70 - 130	11/07/23 17:44	11/08/23 16:13	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.4		4.99	mg/Kg			11/08/23 13:31	1

Client Sample ID: FS34

Lab Sample ID: 890-5567-15

Date Collected: 11/03/23 11:50

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 04:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 04:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 04:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 04:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 04:09	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 04:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	11/07/23 15:52	11/11/23 04:09	1
1,4-Difluorobenzene (Surr)	85		70 - 130	11/07/23 15:52	11/11/23 04:09	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/23 04:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			11/08/23 16:35	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	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 16:35	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 16:35	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS34

Lab Sample ID: 890-5567-15

Date Collected: 11/03/23 11:50

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 16:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	156	S1+	70 - 130			11/07/23 17:44	11/08/23 16:35	1
o-Terphenyl	138	S1+	70 - 130			11/07/23 17:44	11/08/23 16:35	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	202		4.96	mg/Kg			11/08/23 13:48	1

Client Sample ID: FS35

Lab Sample ID: 890-5567-16

Date Collected: 11/03/23 11:30

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 04:30	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			11/07/23 15:52	11/11/23 04:30	1
1,4-Difluorobenzene (Surr)	85		70 - 130			11/07/23 15:52	11/11/23 04:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/23 04:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/08/23 16:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 16:58	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 16:58	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 16:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	176	S1+	70 - 130			11/07/23 17:44	11/08/23 16:58	1
o-Terphenyl	153	S1+	70 - 130			11/07/23 17:44	11/08/23 16:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	213		5.05	mg/Kg			11/08/23 15:36	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS36

Lab Sample ID: 890-5567-17

Date Collected: 11/03/23 12:35

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 04:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 04:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 04:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	11/07/23 15:52	11/11/23 04:50	1
1,4-Difluorobenzene (Surr)	78		70 - 130	11/07/23 15:52	11/11/23 04:50	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			11/11/23 04:50	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			11/08/23 17:20	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		11/07/23 17:44	11/08/23 17:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/07/23 17:44	11/08/23 17:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/07/23 17:44	11/08/23 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	168	S1+	70 - 130	11/07/23 17:44	11/08/23 17:20	1
o-Terphenyl	151	S1+	70 - 130	11/07/23 17:44	11/08/23 17:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	135		4.96	mg/Kg			11/08/23 15:42	1

Client Sample ID: SW06

Lab Sample ID: 890-5567-18

Date Collected: 11/03/23 10:10

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 05:11	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 05:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 05:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/07/23 15:52	11/11/23 05:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 05:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/07/23 15:52	11/11/23 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	11/07/23 15:52	11/11/23 05:11	1
1,4-Difluorobenzene (Surr)	78		70 - 130	11/07/23 15:52	11/11/23 05:11	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: SW06

Lab Sample ID: 890-5567-18

Date Collected: 11/03/23 10:10

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/11/23 05:11	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			11/08/23 17:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 17:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 17:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 17:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	188	S1+	70 - 130	11/07/23 17:44	11/08/23 17:42	1
o-Terphenyl	162	S1+	70 - 130	11/07/23 17:44	11/08/23 17:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80.2		4.96	mg/Kg			11/08/23 15:47	1

Client Sample ID: SW07

Lab Sample ID: 890-5567-19

Date Collected: 11/03/23 11:35

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 05:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 05:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 05:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 05:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 05:31	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 05:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	11/07/23 15:52	11/11/23 05:31	1
1,4-Difluorobenzene (Surr)	79		70 - 130	11/07/23 15:52	11/11/23 05:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/23 05:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/08/23 18:05	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	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 18:05	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 18:05	1

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Client Sample Results

Client: Ensolium
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: SW07

Lab Sample ID: 890-5567-19

Date Collected: 11/03/23 11:35

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130			11/07/23 17:44	11/08/23 18:05	1
o-Terphenyl	128		70 - 130			11/07/23 17:44	11/08/23 18:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80.6		4.97	mg/Kg			11/08/23 15:53	1

Client Sample ID: SW08

Lab Sample ID: 890-5567-20

Date Collected: 11/03/23 13:00

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 05:52	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			11/07/23 15:52	11/11/23 05:52	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130			11/07/23 15:52	11/11/23 05:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/11/23 05:52	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			11/08/23 18:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 18:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 18:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 18:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	153	S1+	70 - 130			11/07/23 17:44	11/08/23 18:27	1
o-Terphenyl	136	S1+	70 - 130			11/07/23 17:44	11/08/23 18:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	102		5.03	mg/Kg			11/08/23 16:10	1

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

Client Sample ID: SW09

Lab Sample ID: 890-5567-21

Date Collected: 11/03/23 11:40

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/08/23 11:51	11/12/23 00:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/08/23 11:51	11/12/23 00:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/08/23 11:51	11/12/23 00:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/08/23 11:51	11/12/23 00:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/08/23 11:51	11/12/23 00:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/08/23 11:51	11/12/23 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	11/08/23 11:51	11/12/23 00:44	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/08/23 11:51	11/12/23 00:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/12/23 00:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/08/23 18:49	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	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 18:49	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 18:49	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	147	S1+	70 - 130	11/07/23 17:44	11/08/23 18:49	1
o-Terphenyl	133	S1+	70 - 130	11/07/23 17:44	11/08/23 18:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.5		4.96	mg/Kg			11/08/23 16:15	1

Client Sample ID: SW10

Lab Sample ID: 890-5567-22

Date Collected: 11/03/23 13:30

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/08/23 11:51	11/12/23 01:04	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:04	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:04	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		11/08/23 11:51	11/12/23 01:04	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:04	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		11/08/23 11:51	11/12/23 01:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	11/08/23 11:51	11/12/23 01:04	1
1,4-Difluorobenzene (Surr)	113		70 - 130	11/08/23 11:51	11/12/23 01:04	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: SW10

Lab Sample ID: 890-5567-22

Date Collected: 11/03/23 13:30

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			11/12/23 01:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/08/23 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	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 19:11	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 19:11	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	198	S1+	70 - 130	11/07/23 17:44	11/08/23 19:11	1
o-Terphenyl	177	S1+	70 - 130	11/07/23 17:44	11/08/23 19:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		5.00	mg/Kg			11/08/23 16:21	1

Client Sample ID: FS37

Lab Sample ID: 890-5567-23

Date Collected: 11/03/23 13:35

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/08/23 11:51	11/12/23 01:25	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:25	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/08/23 11:51	11/12/23 01:25	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:25	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/08/23 11:51	11/12/23 01:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	11/08/23 11:51	11/12/23 01:25	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/08/23 11:51	11/12/23 01:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/12/23 01:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5	mg/Kg			11/08/23 11:04	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	<49.5	U	49.5	mg/Kg		11/07/23 17:47	11/08/23 11:04	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5	mg/Kg		11/07/23 17:47	11/08/23 11:04	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS37

Lab Sample ID: 890-5567-23

Date Collected: 11/03/23 13:35

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.5	U	49.5	mg/Kg		11/07/23 17:47	11/08/23 11:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130			11/07/23 17:47	11/08/23 11:04	1
o-Terphenyl	145	S1+	70 - 130			11/07/23 17:47	11/08/23 11:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.6		5.04	mg/Kg			11/08/23 16:27	1

Client Sample ID: FS38

Lab Sample ID: 890-5567-24

Date Collected: 11/03/23 14:00

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/08/23 11:51	11/12/23 01:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			11/08/23 11:51	11/12/23 01:45	1
1,4-Difluorobenzene (Surr)	116		70 - 130			11/08/23 11:51	11/12/23 01:45	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/12/23 01:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/08/23 12:11	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	<50.5	U	50.5	mg/Kg		11/07/23 17:47	11/08/23 12:11	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/07/23 17:47	11/08/23 12:11	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/07/23 17:47	11/08/23 12:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	160	S1+	70 - 130			11/07/23 17:47	11/08/23 12:11	1
o-Terphenyl	174	S1+	70 - 130			11/07/23 17:47	11/08/23 12:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	371		5.02	mg/Kg			11/08/23 16:32	1

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Surrogate Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-5567-1	FS20	75	101
890-5567-1 MS	FS20	115	105
890-5567-1 MSD	FS20	117	98
890-5567-2	FS21	88	77
890-5567-3	FS22	82	95
890-5567-4	FS23	92	84
890-5567-5	FS24	90	90
890-5567-6	FS25	91	70
890-5567-7	FS26	88	83
890-5567-8	FS27	89	89
890-5567-9	FS28	90	85
890-5567-10	FS29	87	79
890-5567-11	FS30	77	99
890-5567-12	FS31	90	79
890-5567-13	FS32	79	98
890-5567-14	FS33	89	80
890-5567-15	FS34	96	85
890-5567-16	FS35	92	85
890-5567-17	FS36	94	78
890-5567-18	SW06	90	78
890-5567-19	SW07	97	79
890-5567-20	SW08	94	66 S1-
890-5567-21	SW09	83	105
890-5567-21 MS	SW09	99	108
890-5567-21 MSD	SW09	120	103
890-5567-22	SW10	99	113
890-5567-23	FS37	104	105
890-5567-24	FS38	108	116
LCS 880-66433/1-A	Lab Control Sample	119	113
LCS 880-66532/1-A	Lab Control Sample	103	103
LCS 880-66433/2-A	Lab Control Sample Dup	117	110
LCS 880-66532/2-A	Lab Control Sample Dup	113	100
MB 880-66374/5-A	Method Blank	112	148 S1+
MB 880-66433/5-A	Method Blank	72	103
MB 880-66532/5-A	Method Blank	109	142 S1+
MB 880-66611/5-A	Method Blank	72	96

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5567-1	FS20	99	105
890-5567-2	FS21	99	104
890-5567-3	FS22	149 S1+	131 S1+

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Surrogate Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5567-3 MS	FS22	151 S1+	124
890-5567-3 MSD	FS22	151 S1+	122
890-5567-4	FS23	181 S1+	155 S1+
890-5567-5	FS24	141 S1+	125
890-5567-6	FS25	156 S1+	137 S1+
890-5567-7	FS26	146 S1+	129
890-5567-8	FS27	159 S1+	138 S1+
890-5567-9	FS28	155 S1+	139 S1+
890-5567-10	FS29	150 S1+	132 S1+
890-5567-11	FS30	138 S1+	121
890-5567-12	FS31	158 S1+	143 S1+
890-5567-13	FS32	167 S1+	145 S1+
890-5567-14	FS33	153 S1+	137 S1+
890-5567-15	FS34	156 S1+	138 S1+
890-5567-16	FS35	176 S1+	153 S1+
890-5567-17	FS36	168 S1+	151 S1+
890-5567-18	SW06	188 S1+	162 S1+
890-5567-19	SW07	140 S1+	128
890-5567-20	SW08	153 S1+	136 S1+
890-5567-21	SW09	147 S1+	133 S1+
890-5567-22	SW10	198 S1+	177 S1+
890-5567-23	FS37	136 S1+	145 S1+
890-5567-23 MS	FS37	168 S1+	162 S1+
890-5567-23 MSD	FS37	145 S1+	140 S1+
890-5567-24	FS38	160 S1+	174 S1+
890-5568-A-12-F MS	Matrix Spike	105	105
890-5568-A-12-G MSD	Matrix Spike Duplicate	109	106
LCS 880-66452/2-A	Lab Control Sample	88	109
LCS 880-66453/2-A	Lab Control Sample	96	100
LCS 880-66454/2-A	Lab Control Sample	80	91
LCSD 880-66452/3-A	Lab Control Sample Dup	91	99
LCSD 880-66453/3-A	Lab Control Sample Dup	93	95
LCSD 880-66454/3-A	Lab Control Sample Dup	78	88
MB 880-66452/1-A	Method Blank	166 S1+	179 S1+
MB 880-66453/1-A	Method Blank	233 S1+	214 S1+
MB 880-66454/1-A	Method Blank	202 S1+	227 S1+

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66374/5-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66374

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/23 13:38	11/11/23 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/07/23 13:38	11/11/23 12:36	1
1,4-Difluorobenzene (Surr)	148	S1+	70 - 130	11/07/23 13:38	11/11/23 12:36	1

Lab Sample ID: MB 880-66433/5-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66433

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/23 15:52	11/10/23 21:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	11/07/23 15:52	11/10/23 21:57	1
1,4-Difluorobenzene (Surr)	103		70 - 130	11/07/23 15:52	11/10/23 21:57	1

Lab Sample ID: LCS 880-66433/1-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1044		mg/Kg		104	70 - 130
Toluene	0.100	0.09487		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.1009		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2140		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1033		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: LCSD 880-66433/2-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1053		mg/Kg		105	70 - 130	1	35

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: LCSD 880-66433/2-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Toluene	0.100	0.09748		mg/Kg		97	70 - 130	3	35	
Ethylbenzene	0.100	0.09733		mg/Kg		97	70 - 130	4	35	
m-Xylene & p-Xylene	0.200	0.2122		mg/Kg		106	70 - 130	1	35	
o-Xylene	0.100	0.1023		mg/Kg		102	70 - 130	1	35	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	117		70 - 130							
1,4-Difluorobenzene (Surr)	110		70 - 130							

Lab Sample ID: 890-5567-1 MS
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: FS20
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Benzene	<0.00200	U	0.0996	0.09390		mg/Kg		94	70 - 130			
Toluene	<0.00200	U	0.0996	0.09617		mg/Kg		97	70 - 130			
Ethylbenzene	<0.00200	U	0.0996	0.09277		mg/Kg		93	70 - 130			
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1964		mg/Kg		99	70 - 130			
o-Xylene	<0.00200	U	0.0996	0.09317		mg/Kg		94	70 - 130			
		MS	MS									
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	115		70 - 130									
1,4-Difluorobenzene (Surr)	105		70 - 130									

Lab Sample ID: 890-5567-1 MSD
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: FS20
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Benzene	<0.00200	U	0.0990	0.09887		mg/Kg		100	70 - 130	5	35	
Toluene	<0.00200	U	0.0990	0.09974		mg/Kg		101	70 - 130	4	35	
Ethylbenzene	<0.00200	U	0.0990	0.09483		mg/Kg		96	70 - 130	2	35	
m-Xylene & p-Xylene	<0.00401	U	0.198	0.2009		mg/Kg		101	70 - 130	2	35	
o-Xylene	<0.00200	U	0.0990	0.09599		mg/Kg		97	70 - 130	3	35	
		MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	117		70 - 130									
1,4-Difluorobenzene (Surr)	98		70 - 130									

Lab Sample ID: MB 880-66532/5-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66532

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared		Analyzed		Dil Fac
						Time	Date	Time	Date	
Benzene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 00:15			1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 00:15			1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 00:15			1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/08/23 11:51	11/12/23 00:15			1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: MB 880-66532/5-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66532

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 00:15	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/08/23 11:51	11/12/23 00:15	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	109		70 - 130	11/08/23 11:51	11/12/23 00:15	1
1,4-Difluorobenzene (Surr)	142	S1+	70 - 130	11/08/23 11:51	11/12/23 00:15	1

Lab Sample ID: LCS 880-66532/1-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	0.100	0.09843		mg/Kg		98	70 - 130
Toluene	0.100	0.08510		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.07552		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	0.200	0.1826		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09127		mg/Kg		91	70 - 130

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

Lab Sample ID: LCSD 880-66532/2-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
Benzene	0.100	0.1026		mg/Kg		103	70 - 130	4	35
Toluene	0.100	0.08948		mg/Kg		89	70 - 130	5	35
Ethylbenzene	0.100	0.08132		mg/Kg		81	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1874		mg/Kg		94	70 - 130	3	35
o-Xylene	0.100	0.1014		mg/Kg		101	70 - 130	10	35

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

Lab Sample ID: 890-5567-21 MS
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: SW09
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Benzene	<0.00199	U	0.0996	0.1151		mg/Kg		116	70 - 130
Toluene	<0.00199	U	0.0996	0.09259		mg/Kg		93	70 - 130
Ethylbenzene	<0.00199	U	0.0996	0.08722		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1956		mg/Kg		98	70 - 130
o-Xylene	<0.00199	U	0.0996	0.09311		mg/Kg		93	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5567-21 MS
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: SW09
Prep Type: Total/NA
Prep Batch: 66532

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-5567-21 MSD
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: SW09
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.1044		mg/Kg		105	70 - 130	10	35
Toluene	<0.00199	U	0.0990	0.08792		mg/Kg		89	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.0990	0.08667		mg/Kg		88	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.2054		mg/Kg		104	70 - 130	5	35
o-Xylene	<0.00199	U	0.0990	0.09873		mg/Kg		100	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-66611/5-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66611

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/09/23 11:14	11/10/23 11:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	11/09/23 11:14	11/10/23 11:00	1
1,4-Difluorobenzene (Surr)	96		70 - 130	11/09/23 11:14	11/10/23 11:00	1

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

Lab Sample ID: MB 880-66452/1-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66452

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		11/07/23 17:39	11/08/23 07:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/23 17:39	11/08/23 07:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/23 17:39	11/08/23 07:47	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: MB 880-66452/1-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66452

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	166	S1+	70 - 130	11/07/23 17:39	11/08/23 07:47	1
o-Terphenyl	179	S1+	70 - 130	11/07/23 17:39	11/08/23 07:47	1

Lab Sample ID: LCS 880-66452/2-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66452

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	862.5		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	908.3		mg/Kg		91	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	88		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-66452/3-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66452

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	1000	963.0		mg/Kg		96	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	918.2		mg/Kg		92	70 - 130	1	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	91		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-5568-A-12-F MS
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66452

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	993	771.3		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	65.5		993	835.7		mg/Kg		78	70 - 130

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

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5568-A-12-G MSD
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66452

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	<50.5	U	993	780.2		mg/Kg		76	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	65.5		993	875.3		mg/Kg		82	70 - 130	5	20
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	109		70 - 130								
o-Terphenyl	106		70 - 130								

Lab Sample ID: MB 880-66453/1-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66453

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		11/07/23 17:44	11/08/23 08:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 08:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 08:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	233	S1+	70 - 130			11/07/23 17:44	11/08/23 08:27	1
o-Terphenyl	214	S1+	70 - 130			11/07/23 17:44	11/08/23 08:27	1

Lab Sample ID: LCS 880-66453/2-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66453

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	915.5		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	795.7		mg/Kg		80	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	96		70 - 130				
o-Terphenyl	100		70 - 130				

Lab Sample ID: LCSD 880-66453/3-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66453

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	905.2		mg/Kg		91	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	779.1		mg/Kg		78	70 - 130	2	20

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: LCSD 880-66453/3-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66453

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	93		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 890-5567-3 MS
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: FS22
Prep Type: Total/NA
Prep Batch: 66453

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec	Limits
	Result	Qualifier		Result	Qualifier					
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	990	1226		mg/Kg		121		70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	990	1209		mg/Kg		120		70 - 130

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	151	S1+	70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: 890-5567-3 MSD
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: FS22
Prep Type: Total/NA
Prep Batch: 66453

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	990	1175		mg/Kg		115		70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.6	U	990	1202		mg/Kg		120		70 - 130	1	20

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	151	S1+	70 - 130
o-Terphenyl	122		70 - 130

Lab Sample ID: MB 880-66454/1-A
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66454

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/07/23 17:47	11/08/23 08:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/23 17:47	11/08/23 08:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/23 17:47	11/08/23 08:27	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	202	S1+	70 - 130	11/07/23 17:47	11/08/23 08:27	1
o-Terphenyl	227	S1+	70 - 130	11/07/23 17:47	11/08/23 08:27	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: LCS 880-66454/2-A
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	961.0		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	762.3		mg/Kg		76	70 - 130		
		LCS	LCS						
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	80		70 - 130						
o-Terphenyl	91		70 - 130						

Lab Sample ID: LCSD 880-66454/3-A
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	973.7		mg/Kg		97	70 - 130		1	20
Diesel Range Organics (Over C10-C28)	1000	751.9		mg/Kg		75	70 - 130		1	20
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	78		70 - 130							
o-Terphenyl	88		70 - 130							

Lab Sample ID: 890-5567-23 MS
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	1010	1157		mg/Kg		112	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.5	U	1010	1190		mg/Kg		115	70 - 130	
		MS	MS							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	168	S1+	70 - 130							
o-Terphenyl	162	S1+	70 - 130							

Lab Sample ID: 890-5567-23 MSD
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	1010	1070		mg/Kg		104	70 - 130		8	20
Diesel Range Organics (Over C10-C28)	<49.5	U	1010	1029		mg/Kg		99	70 - 130		14	20
		MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	145	S1+	70 - 130									

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5567-23 MSD
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Surrogate	MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	140	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66337/1-A
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/08/23 15:02	1

Lab Sample ID: LCS 880-66337/2-A
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.8		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-66337/3-A
Matrix: Solid
Analysis Batch: 66518

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	258.1		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5564-A-22-C MS
Matrix: Solid
Analysis Batch: 66518

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	399	F1	249	596.4	F1	mg/Kg		79	90 - 110

Lab Sample ID: 890-5564-A-22-F MSD
Matrix: Solid
Analysis Batch: 66518

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	399	F1	249	592.2	F1	mg/Kg		78	90 - 110	1	20

Lab Sample ID: MB 880-66339/1-A
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/08/23 18:19	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-66339/2-A
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.2		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-66339/3-A
Matrix: Solid
Analysis Batch: 66519

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	258.3		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5567-5 MS
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: FS24
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	439		251	706.2		mg/Kg		107	90 - 110

Lab Sample ID: 890-5567-5 MSD
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: FS24
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	439		251	706.2		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-66380/1-A
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/08/23 11:39	1

Lab Sample ID: LCS 880-66380/2-A
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.6		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-66380/3-A
Matrix: Solid
Analysis Batch: 66529

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	258.2		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5567-14 MS
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: FS33
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	92.4		250	353.2		mg/Kg		105	90 - 110

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-5567-14 MSD
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: FS33
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	92.4		250	354.0		mg/Kg		105	90 - 110	0	20

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- 14

QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

GC VOA

Prep Batch: 66374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66374/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 66433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	5035	
890-5567-2	FS21	Total/NA	Solid	5035	
890-5567-3	FS22	Total/NA	Solid	5035	
890-5567-4	FS23	Total/NA	Solid	5035	
890-5567-5	FS24	Total/NA	Solid	5035	
890-5567-6	FS25	Total/NA	Solid	5035	
890-5567-7	FS26	Total/NA	Solid	5035	
890-5567-8	FS27	Total/NA	Solid	5035	
890-5567-9	FS28	Total/NA	Solid	5035	
890-5567-10	FS29	Total/NA	Solid	5035	
890-5567-11	FS30	Total/NA	Solid	5035	
890-5567-12	FS31	Total/NA	Solid	5035	
890-5567-13	FS32	Total/NA	Solid	5035	
890-5567-14	FS33	Total/NA	Solid	5035	
890-5567-15	FS34	Total/NA	Solid	5035	
890-5567-16	FS35	Total/NA	Solid	5035	
890-5567-17	FS36	Total/NA	Solid	5035	
890-5567-18	SW06	Total/NA	Solid	5035	
890-5567-19	SW07	Total/NA	Solid	5035	
890-5567-20	SW08	Total/NA	Solid	5035	
MB 880-66433/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66433/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66433/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5567-1 MS	FS20	Total/NA	Solid	5035	
890-5567-1 MSD	FS20	Total/NA	Solid	5035	

Prep Batch: 66532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-21	SW09	Total/NA	Solid	5035	
890-5567-22	SW10	Total/NA	Solid	5035	
890-5567-23	FS37	Total/NA	Solid	5035	
890-5567-24	FS38	Total/NA	Solid	5035	
MB 880-66532/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66532/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66532/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5567-21 MS	SW09	Total/NA	Solid	5035	
890-5567-21 MSD	SW09	Total/NA	Solid	5035	

Prep Batch: 66611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66611/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 66683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	8021B	66433
890-5567-2	FS21	Total/NA	Solid	8021B	66433
890-5567-3	FS22	Total/NA	Solid	8021B	66433

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

GC VOA (Continued)

Analysis Batch: 66683 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-4	FS23	Total/NA	Solid	8021B	66433
890-5567-5	FS24	Total/NA	Solid	8021B	66433
890-5567-6	FS25	Total/NA	Solid	8021B	66433
890-5567-7	FS26	Total/NA	Solid	8021B	66433
890-5567-8	FS27	Total/NA	Solid	8021B	66433
890-5567-9	FS28	Total/NA	Solid	8021B	66433
890-5567-10	FS29	Total/NA	Solid	8021B	66433
890-5567-11	FS30	Total/NA	Solid	8021B	66433
890-5567-12	FS31	Total/NA	Solid	8021B	66433
890-5567-13	FS32	Total/NA	Solid	8021B	66433
890-5567-14	FS33	Total/NA	Solid	8021B	66433
890-5567-15	FS34	Total/NA	Solid	8021B	66433
890-5567-16	FS35	Total/NA	Solid	8021B	66433
890-5567-17	FS36	Total/NA	Solid	8021B	66433
890-5567-18	SW06	Total/NA	Solid	8021B	66433
890-5567-19	SW07	Total/NA	Solid	8021B	66433
890-5567-20	SW08	Total/NA	Solid	8021B	66433
MB 880-66433/5-A	Method Blank	Total/NA	Solid	8021B	66433
MB 880-66611/5-A	Method Blank	Total/NA	Solid	8021B	66611
LCS 880-66433/1-A	Lab Control Sample	Total/NA	Solid	8021B	66433
LCSD 880-66433/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66433
890-5567-1 MS	FS20	Total/NA	Solid	8021B	66433
890-5567-1 MSD	FS20	Total/NA	Solid	8021B	66433

Analysis Batch: 66684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-21	SW09	Total/NA	Solid	8021B	66532
890-5567-22	SW10	Total/NA	Solid	8021B	66532
890-5567-23	FS37	Total/NA	Solid	8021B	66532
890-5567-24	FS38	Total/NA	Solid	8021B	66532
MB 880-66374/5-A	Method Blank	Total/NA	Solid	8021B	66374
MB 880-66532/5-A	Method Blank	Total/NA	Solid	8021B	66532
LCS 880-66532/1-A	Lab Control Sample	Total/NA	Solid	8021B	66532
LCSD 880-66532/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66532
890-5567-21 MS	SW09	Total/NA	Solid	8021B	66532
890-5567-21 MSD	SW09	Total/NA	Solid	8021B	66532

Analysis Batch: 66857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	Total BTEX	
890-5567-2	FS21	Total/NA	Solid	Total BTEX	
890-5567-3	FS22	Total/NA	Solid	Total BTEX	
890-5567-4	FS23	Total/NA	Solid	Total BTEX	
890-5567-5	FS24	Total/NA	Solid	Total BTEX	
890-5567-6	FS25	Total/NA	Solid	Total BTEX	
890-5567-7	FS26	Total/NA	Solid	Total BTEX	
890-5567-8	FS27	Total/NA	Solid	Total BTEX	
890-5567-9	FS28	Total/NA	Solid	Total BTEX	
890-5567-10	FS29	Total/NA	Solid	Total BTEX	
890-5567-11	FS30	Total/NA	Solid	Total BTEX	
890-5567-12	FS31	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

GC VOA (Continued)

Analysis Batch: 66857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-13	FS32	Total/NA	Solid	Total BTEX	
890-5567-14	FS33	Total/NA	Solid	Total BTEX	
890-5567-15	FS34	Total/NA	Solid	Total BTEX	
890-5567-16	FS35	Total/NA	Solid	Total BTEX	
890-5567-17	FS36	Total/NA	Solid	Total BTEX	
890-5567-18	SW06	Total/NA	Solid	Total BTEX	
890-5567-19	SW07	Total/NA	Solid	Total BTEX	
890-5567-20	SW08	Total/NA	Solid	Total BTEX	
890-5567-21	SW09	Total/NA	Solid	Total BTEX	
890-5567-22	SW10	Total/NA	Solid	Total BTEX	
890-5567-23	FS37	Total/NA	Solid	Total BTEX	
890-5567-24	FS38	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 66452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	8015NM Prep	
890-5567-2	FS21	Total/NA	Solid	8015NM Prep	
MB 880-66452/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66452/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66452/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5568-A-12-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5568-A-12-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 66453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-3	FS22	Total/NA	Solid	8015NM Prep	
890-5567-4	FS23	Total/NA	Solid	8015NM Prep	
890-5567-5	FS24	Total/NA	Solid	8015NM Prep	
890-5567-6	FS25	Total/NA	Solid	8015NM Prep	
890-5567-7	FS26	Total/NA	Solid	8015NM Prep	
890-5567-8	FS27	Total/NA	Solid	8015NM Prep	
890-5567-9	FS28	Total/NA	Solid	8015NM Prep	
890-5567-10	FS29	Total/NA	Solid	8015NM Prep	
890-5567-11	FS30	Total/NA	Solid	8015NM Prep	
890-5567-12	FS31	Total/NA	Solid	8015NM Prep	
890-5567-13	FS32	Total/NA	Solid	8015NM Prep	
890-5567-14	FS33	Total/NA	Solid	8015NM Prep	
890-5567-15	FS34	Total/NA	Solid	8015NM Prep	
890-5567-16	FS35	Total/NA	Solid	8015NM Prep	
890-5567-17	FS36	Total/NA	Solid	8015NM Prep	
890-5567-18	SW06	Total/NA	Solid	8015NM Prep	
890-5567-19	SW07	Total/NA	Solid	8015NM Prep	
890-5567-20	SW08	Total/NA	Solid	8015NM Prep	
890-5567-21	SW09	Total/NA	Solid	8015NM Prep	
890-5567-22	SW10	Total/NA	Solid	8015NM Prep	
MB 880-66453/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66453/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66453/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5567-3 MS	FS22	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

GC Semi VOA (Continued)

Prep Batch: 66453 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-3 MSD	FS22	Total/NA	Solid	8015NM Prep	

Prep Batch: 66454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-23	FS37	Total/NA	Solid	8015NM Prep	
890-5567-24	FS38	Total/NA	Solid	8015NM Prep	
MB 880-66454/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66454/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66454/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5567-23 MS	FS37	Total/NA	Solid	8015NM Prep	
890-5567-23 MSD	FS37	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	8015B NM	66452
890-5567-2	FS21	Total/NA	Solid	8015B NM	66452
MB 880-66452/1-A	Method Blank	Total/NA	Solid	8015B NM	66452
LCS 880-66452/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66452
LCSD 880-66452/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66452
890-5568-A-12-F MS	Matrix Spike	Total/NA	Solid	8015B NM	66452
890-5568-A-12-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66452

Analysis Batch: 66473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-3	FS22	Total/NA	Solid	8015B NM	66453
890-5567-4	FS23	Total/NA	Solid	8015B NM	66453
890-5567-5	FS24	Total/NA	Solid	8015B NM	66453
890-5567-6	FS25	Total/NA	Solid	8015B NM	66453
890-5567-7	FS26	Total/NA	Solid	8015B NM	66453
890-5567-8	FS27	Total/NA	Solid	8015B NM	66453
890-5567-9	FS28	Total/NA	Solid	8015B NM	66453
890-5567-10	FS29	Total/NA	Solid	8015B NM	66453
890-5567-11	FS30	Total/NA	Solid	8015B NM	66453
890-5567-12	FS31	Total/NA	Solid	8015B NM	66453
890-5567-13	FS32	Total/NA	Solid	8015B NM	66453
890-5567-14	FS33	Total/NA	Solid	8015B NM	66453
890-5567-15	FS34	Total/NA	Solid	8015B NM	66453
890-5567-16	FS35	Total/NA	Solid	8015B NM	66453
890-5567-17	FS36	Total/NA	Solid	8015B NM	66453
890-5567-18	SW06	Total/NA	Solid	8015B NM	66453
890-5567-19	SW07	Total/NA	Solid	8015B NM	66453
890-5567-20	SW08	Total/NA	Solid	8015B NM	66453
890-5567-21	SW09	Total/NA	Solid	8015B NM	66453
890-5567-22	SW10	Total/NA	Solid	8015B NM	66453
MB 880-66453/1-A	Method Blank	Total/NA	Solid	8015B NM	66453
LCS 880-66453/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66453
LCSD 880-66453/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66453
890-5567-3 MS	FS22	Total/NA	Solid	8015B NM	66453
890-5567-3 MSD	FS22	Total/NA	Solid	8015B NM	66453

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

GC Semi VOA

Analysis Batch: 66475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-23	FS37	Total/NA	Solid	8015B NM	66454
890-5567-24	FS38	Total/NA	Solid	8015B NM	66454
MB 880-66454/1-A	Method Blank	Total/NA	Solid	8015B NM	66454
LCS 880-66454/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66454
LCSD 880-66454/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66454
890-5567-23 MS	FS37	Total/NA	Solid	8015B NM	66454
890-5567-23 MSD	FS37	Total/NA	Solid	8015B NM	66454

Analysis Batch: 66583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	8015 NM	
890-5567-2	FS21	Total/NA	Solid	8015 NM	
890-5567-3	FS22	Total/NA	Solid	8015 NM	
890-5567-4	FS23	Total/NA	Solid	8015 NM	
890-5567-5	FS24	Total/NA	Solid	8015 NM	
890-5567-6	FS25	Total/NA	Solid	8015 NM	
890-5567-7	FS26	Total/NA	Solid	8015 NM	
890-5567-8	FS27	Total/NA	Solid	8015 NM	
890-5567-9	FS28	Total/NA	Solid	8015 NM	
890-5567-10	FS29	Total/NA	Solid	8015 NM	
890-5567-11	FS30	Total/NA	Solid	8015 NM	
890-5567-12	FS31	Total/NA	Solid	8015 NM	
890-5567-13	FS32	Total/NA	Solid	8015 NM	
890-5567-14	FS33	Total/NA	Solid	8015 NM	
890-5567-15	FS34	Total/NA	Solid	8015 NM	
890-5567-16	FS35	Total/NA	Solid	8015 NM	
890-5567-17	FS36	Total/NA	Solid	8015 NM	
890-5567-18	SW06	Total/NA	Solid	8015 NM	
890-5567-19	SW07	Total/NA	Solid	8015 NM	
890-5567-20	SW08	Total/NA	Solid	8015 NM	
890-5567-21	SW09	Total/NA	Solid	8015 NM	
890-5567-22	SW10	Total/NA	Solid	8015 NM	
890-5567-23	FS37	Total/NA	Solid	8015 NM	
890-5567-24	FS38	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-16	FS35	Soluble	Solid	DI Leach	
890-5567-17	FS36	Soluble	Solid	DI Leach	
890-5567-18	SW06	Soluble	Solid	DI Leach	
890-5567-19	SW07	Soluble	Solid	DI Leach	
890-5567-20	SW08	Soluble	Solid	DI Leach	
890-5567-21	SW09	Soluble	Solid	DI Leach	
890-5567-22	SW10	Soluble	Solid	DI Leach	
890-5567-23	FS37	Soluble	Solid	DI Leach	
890-5567-24	FS38	Soluble	Solid	DI Leach	
MB 880-66337/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66337/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66337/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

HPLC/IC (Continued)

Leach Batch: 66337 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5564-A-22-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5564-A-22-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 66339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Soluble	Solid	DI Leach	
890-5567-2	FS21	Soluble	Solid	DI Leach	
890-5567-3	FS22	Soluble	Solid	DI Leach	
890-5567-4	FS23	Soluble	Solid	DI Leach	
890-5567-5	FS24	Soluble	Solid	DI Leach	
890-5567-6	FS25	Soluble	Solid	DI Leach	
890-5567-7	FS26	Soluble	Solid	DI Leach	
890-5567-8	FS27	Soluble	Solid	DI Leach	
890-5567-9	FS28	Soluble	Solid	DI Leach	
890-5567-10	FS29	Soluble	Solid	DI Leach	
MB 880-66339/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66339/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 880-66339/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5567-5 MS	FS24	Soluble	Solid	DI Leach	
890-5567-5 MSD	FS24	Soluble	Solid	DI Leach	

Leach Batch: 66380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-11	FS30	Soluble	Solid	DI Leach	
890-5567-12	FS31	Soluble	Solid	DI Leach	
890-5567-13	FS32	Soluble	Solid	DI Leach	
890-5567-14	FS33	Soluble	Solid	DI Leach	
890-5567-15	FS34	Soluble	Solid	DI Leach	
MB 880-66380/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66380/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 880-66380/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5567-14 MS	FS33	Soluble	Solid	DI Leach	
890-5567-14 MSD	FS33	Soluble	Solid	DI Leach	

Analysis Batch: 66518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-16	FS35	Soluble	Solid	300.0	66337
890-5567-17	FS36	Soluble	Solid	300.0	66337
890-5567-18	SW06	Soluble	Solid	300.0	66337
890-5567-19	SW07	Soluble	Solid	300.0	66337
890-5567-20	SW08	Soluble	Solid	300.0	66337
890-5567-21	SW09	Soluble	Solid	300.0	66337
890-5567-22	SW10	Soluble	Solid	300.0	66337
890-5567-23	FS37	Soluble	Solid	300.0	66337
890-5567-24	FS38	Soluble	Solid	300.0	66337
MB 880-66337/1-A	Method Blank	Soluble	Solid	300.0	66337
LCS 880-66337/2-A	Lab Control Sample	Soluble	Solid	300.0	66337
LCS 880-66337/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66337
890-5564-A-22-C MS	Matrix Spike	Soluble	Solid	300.0	66337
890-5564-A-22-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	66337

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

HPLC/IC

Analysis Batch: 66519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Soluble	Solid	300.0	66339
890-5567-2	FS21	Soluble	Solid	300.0	66339
890-5567-3	FS22	Soluble	Solid	300.0	66339
890-5567-4	FS23	Soluble	Solid	300.0	66339
890-5567-5	FS24	Soluble	Solid	300.0	66339
890-5567-6	FS25	Soluble	Solid	300.0	66339
890-5567-7	FS26	Soluble	Solid	300.0	66339
890-5567-8	FS27	Soluble	Solid	300.0	66339
890-5567-9	FS28	Soluble	Solid	300.0	66339
890-5567-10	FS29	Soluble	Solid	300.0	66339
MB 880-66339/1-A	Method Blank	Soluble	Solid	300.0	66339
LCS 880-66339/2-A	Lab Control Sample	Soluble	Solid	300.0	66339
LCSD 880-66339/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66339
890-5567-5 MS	FS24	Soluble	Solid	300.0	66339
890-5567-5 MSD	FS24	Soluble	Solid	300.0	66339

Analysis Batch: 66529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-11	FS30	Soluble	Solid	300.0	66380
890-5567-12	FS31	Soluble	Solid	300.0	66380
890-5567-13	FS32	Soluble	Solid	300.0	66380
890-5567-14	FS33	Soluble	Solid	300.0	66380
890-5567-15	FS34	Soluble	Solid	300.0	66380
MB 880-66380/1-A	Method Blank	Soluble	Solid	300.0	66380
LCS 880-66380/2-A	Lab Control Sample	Soluble	Solid	300.0	66380
LCSD 880-66380/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66380
890-5567-14 MS	FS33	Soluble	Solid	300.0	66380
890-5567-14 MSD	FS33	Soluble	Solid	300.0	66380

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS20

Lab Sample ID: 890-5567-1

Date Collected: 11/03/23 08:45

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 22:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 22:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 19:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66452	11/07/23 17:40	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66469	11/08/23 19:15	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:33	CH	EET MID

Client Sample ID: FS21

Lab Sample ID: 890-5567-2

Date Collected: 11/03/23 08:50

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 22:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 22:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 19:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	66452	11/07/23 17:40	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66469	11/08/23 19:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:38	CH	EET MID

Client Sample ID: FS22

Lab Sample ID: 890-5567-3

Date Collected: 11/03/23 08:55

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 22:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 22:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 11:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 11:04	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:44	CH	EET MID

Client Sample ID: FS23

Lab Sample ID: 890-5567-4

Date Collected: 11/03/23 09:00

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 23:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 23:20	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS23

Lab Sample ID: 890-5567-4

Date Collected: 11/03/23 09:00

Matrix: Solid

Date Received: 11/03/23 14:50

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			66583	11/08/23 12:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 12:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:49	CH	EET MID

Client Sample ID: FS24

Lab Sample ID: 890-5567-5

Date Collected: 11/03/23 09:25

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 23:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 23:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 12:34	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 12:34	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:55	CH	EET MID

Client Sample ID: FS25

Lab Sample ID: 890-5567-6

Date Collected: 11/03/23 09:30

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 00:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 00:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 12:56	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:12	CH	EET MID

Client Sample ID: FS26

Lab Sample ID: 890-5567-7

Date Collected: 11/03/23 09:15

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 00:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 00:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 13:18	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 13:18	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS26

Lab Sample ID: 890-5567-7

Date Collected: 11/03/23 09:15

Matrix: Solid

Date Received: 11/03/23 14:50

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	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:18	CH	EET MID

Client Sample ID: FS27

Lab Sample ID: 890-5567-8

Date Collected: 11/03/23 09:20

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 00:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 00:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 13:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 13:40	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:35	CH	EET MID

Client Sample ID: FS28

Lab Sample ID: 890-5567-9

Date Collected: 11/03/23 10:55

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 01:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 01:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 14:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 14:02	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:40	CH	EET MID

Client Sample ID: FS29

Lab Sample ID: 890-5567-10

Date Collected: 11/03/23 11:00

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 01:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 01:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 14:23	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 14:23	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:46	CH	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS30

Lab Sample ID: 890-5567-11

Date Collected: 11/03/23 11:45

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 02:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 02:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 14:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 14:45	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:14	CH	EET MID

Client Sample ID: FS31

Lab Sample ID: 890-5567-12

Date Collected: 11/03/23 11:10

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 15:06	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 15:06	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:20	CH	EET MID

Client Sample ID: FS32

Lab Sample ID: 890-5567-13

Date Collected: 11/03/23 11:15

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 15:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 15:51	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:25	CH	EET MID

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:49	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20

Matrix: Solid

Date Received: 11/03/23 14:50

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			66583	11/08/23 16:13	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 16:13	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:31	CH	EET MID

Client Sample ID: FS34

Lab Sample ID: 890-5567-15

Date Collected: 11/03/23 11:50

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 04:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 04:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 16:35	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 16:35	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:48	CH	EET MID

Client Sample ID: FS35

Lab Sample ID: 890-5567-16

Date Collected: 11/03/23 11:30

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 04:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 04:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 16:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 16:58	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:36	CH	EET MID

Client Sample ID: FS36

Lab Sample ID: 890-5567-17

Date Collected: 11/03/23 12:35

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 04:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 04:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 17:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 17:20	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS36

Lab Sample ID: 890-5567-17

Date Collected: 11/03/23 12:35

Matrix: Solid

Date Received: 11/03/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:42	CH	EET MID

Client Sample ID: SW06

Lab Sample ID: 890-5567-18

Date Collected: 11/03/23 10:10

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 17:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 17:42	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:47	CH	EET MID

Client Sample ID: SW07

Lab Sample ID: 890-5567-19

Date Collected: 11/03/23 11:35

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 18:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 18:05	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:53	CH	EET MID

Client Sample ID: SW08

Lab Sample ID: 890-5567-20

Date Collected: 11/03/23 13:00

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 18:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 18:27	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:10	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: SW09

Lab Sample ID: 890-5567-21

Date Collected: 11/03/23 11:40

Matrix: Solid

Date Received: 11/03/23 14:50

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	66532	11/08/23 11:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/12/23 00:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/12/23 00:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 18:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 18:49	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:15	CH	EET MID

Client Sample ID: SW10

Lab Sample ID: 890-5567-22

Date Collected: 11/03/23 13:30

Matrix: Solid

Date Received: 11/03/23 14:50

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	66532	11/08/23 11:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/12/23 01:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/12/23 01:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 19:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 19:11	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:21	CH	EET MID

Client Sample ID: FS37

Lab Sample ID: 890-5567-23

Date Collected: 11/03/23 13:35

Matrix: Solid

Date Received: 11/03/23 14:50

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	66532	11/08/23 11:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/12/23 01:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/12/23 01:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 11:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	66454	11/07/23 17:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66475	11/08/23 11:04	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:27	CH	EET MID

Client Sample ID: FS38

Lab Sample ID: 890-5567-24

Date Collected: 11/03/23 14:00

Matrix: Solid

Date Received: 11/03/23 14:50

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	66532	11/08/23 11:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/12/23 01:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/12/23 01:45	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

Client Sample ID: FS38

Lab Sample ID: 890-5567-24

Date Collected: 11/03/23 14:00

Matrix: Solid

Date Received: 11/03/23 14:50

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			66583	11/08/23 12:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66454	11/07/23 17:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66475	11/08/23 12:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:32	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

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Method Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-5567-1	FS20	Solid	11/03/23 08:45	11/03/23 14:50
890-5567-2	FS21	Solid	11/03/23 08:50	11/03/23 14:50
890-5567-3	FS22	Solid	11/03/23 08:55	11/03/23 14:50
890-5567-4	FS23	Solid	11/03/23 09:00	11/03/23 14:50
890-5567-5	FS24	Solid	11/03/23 09:25	11/03/23 14:50
890-5567-6	FS25	Solid	11/03/23 09:30	11/03/23 14:50
890-5567-7	FS26	Solid	11/03/23 09:15	11/03/23 14:50
890-5567-8	FS27	Solid	11/03/23 09:20	11/03/23 14:50
890-5567-9	FS28	Solid	11/03/23 10:55	11/03/23 14:50
890-5567-10	FS29	Solid	11/03/23 11:00	11/03/23 14:50
890-5567-11	FS30	Solid	11/03/23 11:45	11/03/23 14:50
890-5567-12	FS31	Solid	11/03/23 11:10	11/03/23 14:50
890-5567-13	FS32	Solid	11/03/23 11:15	11/03/23 14:50
890-5567-14	FS33	Solid	11/03/23 11:20	11/03/23 14:50
890-5567-15	FS34	Solid	11/03/23 11:50	11/03/23 14:50
890-5567-16	FS35	Solid	11/03/23 11:30	11/03/23 14:50
890-5567-17	FS36	Solid	11/03/23 12:35	11/03/23 14:50
890-5567-18	SW06	Solid	11/03/23 10:10	11/03/23 14:50
890-5567-19	SW07	Solid	11/03/23 11:35	11/03/23 14:50
890-5567-20	SW08	Solid	11/03/23 13:00	11/03/23 14:50
890-5567-21	SW09	Solid	11/03/23 11:40	11/03/23 14:50
890-5567-22	SW10	Solid	11/03/23 13:30	11/03/23 14:50
890-5567-23	FS37	Solid	11/03/23 13:35	11/03/23 14:50
890-5567-24	FS38	Solid	11/03/23 14:00	11/03/23 14:50

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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) 509-3324
 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



Environment Testing

XENCO

Work Order No:

www.xenco.com Page 1 of 3

Project Manager:	Ben Belli	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XIO Energy
Address:	3122 Nat'l Parks Hwy	Address:	3104 Greens St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	bbelli@ensolum.com

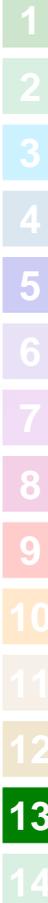
Project Name:	HAT MESA 32-2	Turn Around	
Project Number:	0301558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location:	32-53601, 703-688	Due Date:	
Sampler's Name:	Meredith Roberts	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	Parameters		Pres. Code	ANALYSIS REQUEST	Preservative Codes
						Grab	# of Cont			
FS20	S	11/3/23	0845	3'	C					None: NO DI Water: H ₂ O Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SACP
FS21			0850	3.5'						
FS22			0855	3'						
FS23			0900							
FS24			0915							
FS25			0930							
FS26			0915							
FS27			0920							
FS28			1055							
FS29			1100							

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Sheddy</i>	<i>alberta</i>	11/3/23 10:13			



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) 794-7296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenoco



Work Order No:

www.xenoco.com Page 2 of 3

Project Manager: **Ben Bell**
 Company Name: **Enselwm, LLC**
 Address: **3122 Nati Parks Hwy**
 City, State ZIP: **Carlsbad, NM 88220**
 Phone: **989-854-0852** Email: **bbell@ensolum.com**

Bill to: (if different) **Garrett Green**
 Company Name: **XTO Energy**
 Address: **3104 E Greene St**
 City, State ZIP: **Carlsbad, NM 88220**

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

Project Name: **HAI MESA 32-2**
 Project Number: **03C1558249**
 Project Location: **32-53601-103-688**
 Sampler's Name: **Meredith Roberts**
 PO #:

Turn Around: Routine Rush
 Due Date: **TAT starts the day received by the lab, if received by 4:30pm**

Temp Blank: Yes No
 Thermometer ID: **32-53601-103-688**
 Cooler Custody Seals: Yes No N/A
 Correction Factor: **Meredith Roberts**
 Sample Custody Seals: Yes No N/A
 Temperature Reading: **32-53601-103-688**
 Corrected Temperature:

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters		Pres. Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
							Yes	No				
FS30	S	11/3/23	3'	1115	C	1				None: NO	DI Water: H ₂ O	
FS31				1110						Cool: Cool	MeOH: Me	
FS32				1115						HCL: HC	HNO ₃ : HN	
FS33				1120						H ₂ SO ₄ : H ₂	NaOH: Na	
FS34				1150						H ₃ PO ₄ : HP		
FS35				1130						NaHSO ₄ : NABIS		
FS36				1235						Na ₂ S ₂ O ₃ : NaSO ₃		
SW06			0-3.5'	1000						Zn Acetate+NaOH: Zn		
SW07			0-3'	1010						NaOH+Ascorbic Acid: SACP		
SW08			0-3'	1135								
Total 2007/6010 2008/6020: 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 Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenoco 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 Xenoco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature) **Meredith Roberts** Date/Time **11/3/23 10:22**
 Received by: (Signature) **Ben Bell** Date/Time **11/3/23 10:22**

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Revised Date: 08/25/2020 Rev 2020.2

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

Environment Testing

Xenoco

Work-Order No:

www.xenoco.com Page 3 of 3

Project Manager:	Ben Bellil	Bill to: (if different)	Garrett Green
Company Name:	Ensolium, LLC	Company Name:	XTO Energy
Address:	3122 Nat'l Parks Hwy	Address:	3104 E Greene St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	bbellil@ensolium.com

Project Name:	HAI MESA 32-2	Turn Around	
Project Number:	03C1558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location:	32-53601-103-688	Due Date:	
Sampler's Name:	Meredith Roberts	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters		Pres. Code	ANALYSIS REQUEST	Preservative Codes
							Temp Blank:	Wet Ice:			
SW09	S	11/3/23	1300	0-3'	C	1	Yes	No			None: NO DI Water: H ₂ O Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ NaOH: Na H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SACP
SW10	↓	↓	1140	0-3'	↓	↓	↓	↓			
FS37	↓	↓	1330	3'	↓	↓	↓	↓			
FS38	↓	↓	1335	3'	↓	↓	↓	↓			

Total 2007 / 6010 2008 / 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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Meredith Roberts</i>	<i>abraham</i>	14:49 10/23			

Revised Date: 08/25/2020 Rev. 2020.2



Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5567-1
SDG Number: 32.53601,-103,688

Login Number: 5567

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	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5567-1
SDG Number: 32.53601,-103,688

Login Number: 5567
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 11/07/23 12:07 PM

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

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APPENDIX F
NMOCD Notifications

From: [Rodgers, Scott, EMNRD](#)
To: [Collins, Melanie; spills@slo.state.nm.us](#); [Hamlet, Robert, EMNRD](#); [Bratcher, Michael, EMNRD](#); [Velez, Nelson, EMNRD](#)
Cc: [Green, Garrett J](#); [Ben Belill](#); [DelawareSpills /SM](#); [Lambert, Tommee L](#)
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 10/30/23 - 11/3/23)
Date: Wednesday, October 25, 2023 5:59:47 PM
Attachments: [image003.png](#)

You don't often get email from scott.rodgers@emnrd.nm.gov. [Learn why this is important](#)

[EXTERNAL EMAIL**]**

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Scott Rodgers • Environmental Specialist
 Environmental Bureau
 EMNRD - Oil Conservation Division
 8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
 505.469.1830 | scott.rodgers@emnrd.nm.gov
<http://www.emnrd.nm.gov/oce>



From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Wednesday, October 25, 2023 3:11 PM
To: spills@slo.state.nm.us; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>; bbelill@ensolum.com; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Lambert, Tommee L <tommee.l.lambert@exxonmobil.com>
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 10/30/23 - 11/3/23)

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

XTO plans to complete final sampling activities at the sites listed below for the week of October 30, 2023, between 8 a.m. and 5 p.m MST.

Thank you,

Site Name	BEU Connector PW Booster
Location	H-22-23S-30E; Eddy County, NM
Incident ID	nAPP2213151424
Source & Description of Activities	Sampling
Expected Duration for Activities	5 Days (10.30.23-11.3.23)

Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Site Name	Mobley Ranch Pipeline
Location	H-22-23S-30E; Eddy County, NM
Incident ID	nAPP2316045229
Source & Description of Activities	Sampling
Expected Duration for Activities	5 Days (10.30.23-11.3.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Site Name	Hat Mesa 32-2
Location	C-32-20S-33E; Lea County, NM
Incident ID	nAPP2316046257
Source & Description of Activities	Sampling
Expected Duration for Activities	4 Days (10.31.23-11.3.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Thank you,

Melanie Collins



Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756



APPENDIX B

Photographic Log



Photographic Log
XTO Energy, Inc
Hat Mesa 32 - 2
Incident Number nAPP2316046257



Photograph 1 Date: 6/19/2023
Description: Site assessment activities, release extent
View: Northwest

Photograph 2 Date: 7/14/2023
Description: Delineation activities, BH04
View: East

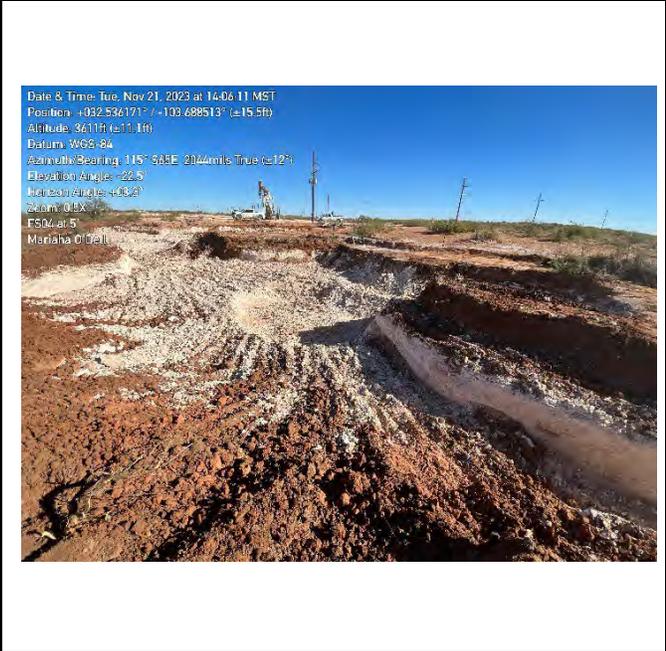


Photograph 3 Date: 11/2/2023
Description: Excavation extent
View: Southwest

Photograph 4 Date: 11/3/2023
Description: Excavation extent
View: Southwest

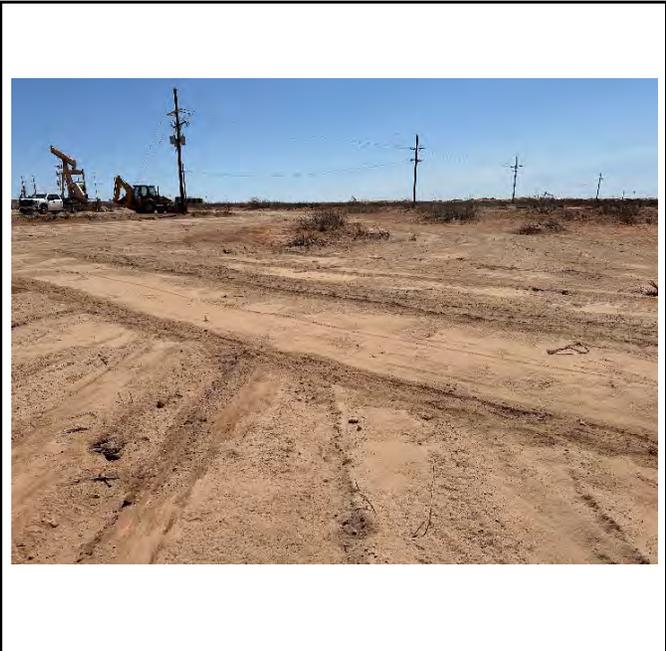


Photographic Log
 XTO Energy, Inc
 Hat Mesa 32 - 2
 Incident Number nAPP2316046257



Photograph 5 Date: 11/21/2023
 Description: Excavation extent
 View: Southeast

Photograph 6 Date: 11/21/2023
 Description: Excavation extent
 View: Southwest



Photograph 7 Date: 6/6/2024
 Description: Backfill
 View: Southeast

Photograph 8 Date: 6/6/2024
 Description: Backfill
 View: Southwest



APPENDIX C

Laboratory Analytical Reports & Chain of Custody



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum

601 N. Marienfeld St.
Suite 400

Midland, Texas 79701

Generated 6/26/2023 10:43:50 AM

JOB DESCRIPTION

Hat Mesa 32-2
SDG NUMBER 03C1558249

JOB NUMBER

890-4836-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



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
6/26/2023 10:43:50 AM

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

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Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-4836-1
SDG: 03C1558249

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Job ID: 890-4836-1

Laboratory: Eurofins Carlsbad**Narrative**

**Job Narrative
890-4836-1****Receipt**

The samples were received on 6/19/2023 3:52 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 5.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-4836-1), SS02 (890-4836-2), SS03 (890-4836-3), SS04 (890-4836-4), SS05 (890-4836-5), SS06 (890-4836-6), SS07 (890-4836-7) and SS08 (890-4836-8).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-56020 and analytical batch 880-56082 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 laboratory control sample duplicate (LCSD) for preparation batch 880-56020 and analytical batch 880-56082 recovered outside control limits for the following analytes: Toluene. Only an LCS or an LCSD need to be acceptable per the method and the RPD was acceptable; therefore, the data was qualified and reported.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-56026 and analytical batch 880-56147 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SS05 (890-4836-5). 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: SS03 (890-4836-3) and SS04 (890-4836-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike (MS) recoveries for preparation batch 880-56026 and analytical batch 880-56147 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS01

Lab Sample ID: 890-4836-1

Date Collected: 06/19/23 09:25

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0990	U	0.0990	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
Toluene	0.192	*+	0.0990	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
Ethylbenzene	0.292		0.0990	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
m-Xylene & p-Xylene	0.355		0.198	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
o-Xylene	0.162		0.0990	mg/Kg		06/21/23 13:48	06/23/23 06:13	50
Xylenes, Total	0.517		0.198	mg/Kg		06/21/23 13:48	06/23/23 06:13	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	06/21/23 13:48	06/23/23 06:13	50
1,4-Difluorobenzene (Surr)	89		70 - 130	06/21/23 13:48	06/23/23 06:13	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.00		0.198	mg/Kg			06/23/23 14:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3100		249	mg/Kg			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	371		249	mg/Kg		06/21/23 14:55	06/23/23 17:58	5
Diesel Range Organics (Over C10-C28)	2280		249	mg/Kg		06/21/23 14:55	06/23/23 17:58	5
Oil Range Organics (Over C28-C36)	448		249	mg/Kg		06/21/23 14:55	06/23/23 17:58	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	06/21/23 14:55	06/23/23 17:58	5
o-Terphenyl	116		70 - 130	06/21/23 14:55	06/23/23 17:58	5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4210		49.6	mg/Kg			06/21/23 19:30	10

Client Sample ID: SS02

Lab Sample ID: 890-4836-2

Date Collected: 06/19/23 09:30

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
Toluene	<0.00201	U *+ F1	0.00201	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
Ethylbenzene	<0.00201	U F1	0.00201	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
o-Xylene	<0.00201	U F1	0.00201	mg/Kg		06/21/23 13:48	06/23/23 03:30	1
Xylenes, Total	<0.00402	U F1	0.00402	mg/Kg		06/21/23 13:48	06/23/23 03:30	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS02

Lab Sample ID: 890-4836-2

Date Collected: 06/19/23 09:30

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	06/21/23 13:48	06/23/23 03:30	1
1,4-Difluorobenzene (Surr)	92		70 - 130	06/21/23 13:48	06/23/23 03:30	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			06/23/23 14:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	645		50.0	mg/Kg			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/21/23 14:55	06/23/23 21:05	1
Diesel Range Organics (Over C10-C28)	565		50.0	mg/Kg		06/21/23 14:55	06/23/23 21:05	1
Oil Range Organics (Over C28-C36)	80.0		50.0	mg/Kg		06/21/23 14:55	06/23/23 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	06/21/23 14:55	06/23/23 21:05	1
o-Terphenyl	126		70 - 130	06/21/23 14:55	06/23/23 21:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4950		49.9	mg/Kg			06/21/23 19:48	10

Client Sample ID: SS03

Lab Sample ID: 890-4836-3

Date Collected: 06/19/23 09:35

Matrix: Solid

Date Received: 06/19/23 15:52

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		06/21/23 13:48	06/23/23 03:50	1
Toluene	<0.00200	U *+	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:50	1
Ethylbenzene	0.00649		0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:50	1
m-Xylene & p-Xylene	0.0171		0.00401	mg/Kg		06/21/23 13:48	06/23/23 03:50	1
o-Xylene	0.0188		0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:50	1
Xylenes, Total	0.0359		0.00401	mg/Kg		06/21/23 13:48	06/23/23 03:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	06/21/23 13:48	06/23/23 03:50	1
1,4-Difluorobenzene (Surr)	92		70 - 130	06/21/23 13:48	06/23/23 03:50	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0424		0.00401	mg/Kg			06/23/23 14:13	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS03

Lab Sample ID: 890-4836-3

Date Collected: 06/19/23 09:35

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2150		50.0	mg/Kg			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	194		50.0	mg/Kg		06/21/23 14:55	06/23/23 20:19	1
Diesel Range Organics (Over C10-C28)	1620		50.0	mg/Kg		06/21/23 14:55	06/23/23 20:19	1
Oil Range Organics (Over C28-C36)	332		50.0	mg/Kg		06/21/23 14:55	06/23/23 20:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130			06/21/23 14:55	06/23/23 20:19	1
o-Terphenyl	135	S1+	70 - 130			06/21/23 14:55	06/23/23 20:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6560		50.2	mg/Kg			06/21/23 19:53	10

Client Sample ID: SS04

Lab Sample ID: 890-4836-4

Date Collected: 06/19/23 09:40

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0996	U	0.0996	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
Toluene	1.39	*+	0.0996	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
Ethylbenzene	0.513		0.0996	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
m-Xylene & p-Xylene	0.491		0.199	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
o-Xylene	0.307		0.0996	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
Xylenes, Total	0.798		0.199	mg/Kg		06/21/23 13:48	06/23/23 06:33	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			06/21/23 13:48	06/23/23 06:33	50
1,4-Difluorobenzene (Surr)	75		70 - 130			06/21/23 13:48	06/23/23 06:33	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	2.70		0.199	mg/Kg			06/23/23 14:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	18800		499	mg/Kg			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	2120		499	mg/Kg		06/21/23 14:55	06/23/23 18:22	10
Diesel Range Organics (Over C10-C28)	13800		499	mg/Kg		06/21/23 14:55	06/23/23 18:22	10

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS04

Lab Sample ID: 890-4836-4

Date Collected: 06/19/23 09:40

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	2860		499	mg/Kg		06/21/23 14:55	06/23/23 18:22	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	338	S1+	70 - 130			06/21/23 14:55	06/23/23 18:22	10
o-Terphenyl	532	S1+	70 - 130			06/21/23 14:55	06/23/23 18:22	10

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	451		5.03	mg/Kg			06/21/23 19:59	1

Client Sample ID: SS05

Lab Sample ID: 890-4836-5

Date Collected: 06/19/23 09:55

Matrix: Solid

Date Received: 06/19/23 15:52

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		06/21/23 13:48	06/23/23 04:11	1
Toluene	<0.00198	U **	0.00198	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		06/21/23 13:48	06/23/23 04:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			06/21/23 13:48	06/23/23 04:11	1
1,4-Difluorobenzene (Surr)	97		70 - 130			06/21/23 13:48	06/23/23 04:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			06/23/23 14:13	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			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 12:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9	mg/Kg		06/21/23 14:55	06/23/23 12:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 12:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130			06/21/23 14:55	06/23/23 12:14	1
o-Terphenyl	137	S1+	70 - 130			06/21/23 14:55	06/23/23 12:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.1		4.98	mg/Kg			06/21/23 20:05	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS06

Lab Sample ID: 890-4836-6

Date Collected: 06/19/23 10:00

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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		06/21/23 13:48	06/23/23 04:31	1
Toluene	<0.00201	U **	0.00201	mg/Kg		06/21/23 13:48	06/23/23 04:31	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/21/23 13:48	06/23/23 04:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		06/21/23 13:48	06/23/23 04:31	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		06/21/23 13:48	06/23/23 04:31	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/21/23 13:48	06/23/23 04:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	06/21/23 13:48	06/23/23 04:31	1
1,4-Difluorobenzene (Surr)	94		70 - 130	06/21/23 13:48	06/23/23 04:31	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			06/23/23 14:13	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			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 13:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 13:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	06/21/23 14:55	06/23/23 13:22	1
o-Terphenyl	106		70 - 130	06/21/23 14:55	06/23/23 13:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.7		4.99	mg/Kg			06/21/23 20:23	1

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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		06/21/23 13:48	06/23/23 04:51	1
Toluene	<0.00202	U **	0.00202	mg/Kg		06/21/23 13:48	06/23/23 04:51	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/21/23 13:48	06/23/23 04:51	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		06/21/23 13:48	06/23/23 04:51	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/21/23 13:48	06/23/23 04:51	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		06/21/23 13:48	06/23/23 04:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	06/21/23 13:48	06/23/23 04:51	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05

Matrix: Solid

Date Received: 06/19/23 15:52

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	06/21/23 13:48	06/23/23 04:51	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			06/23/23 14:13	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			06/26/23 11:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 13:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 13:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/21/23 14:55	06/23/23 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	06/21/23 14:55	06/23/23 13:45	1
o-Terphenyl	130		70 - 130	06/21/23 14:55	06/23/23 13:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.7		4.99	mg/Kg			06/21/23 20:28	1

Client Sample ID: SS08

Lab Sample ID: 890-4836-8

Date Collected: 06/19/23 10:10

Matrix: Solid

Date Received: 06/19/23 15:52

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		06/21/23 13:48	06/23/23 05:12	1
Toluene	<0.00199	U *	0.00199	mg/Kg		06/21/23 13:48	06/23/23 05:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		06/21/23 13:48	06/23/23 05:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/21/23 13:48	06/23/23 05:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		06/21/23 13:48	06/23/23 05:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/21/23 13:48	06/23/23 05:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	06/21/23 13:48	06/23/23 05:12	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/21/23 13:48	06/23/23 05:12	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/23/23 14:13	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			06/26/23 11:27	1

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
 SDG: 03C1558249

Client Sample ID: SS08

Lab Sample ID: 890-4836-8

Date Collected: 06/19/23 10:10

Matrix: Solid

Date Received: 06/19/23 15:52

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		06/21/23 14:55	06/23/23 14:08	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 14:08	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		06/21/23 14:55	06/23/23 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/21/23 14:55	06/23/23 14:08	1
o-Terphenyl	112		70 - 130	06/21/23 14:55	06/23/23 14:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.4		5.00	mg/Kg			06/21/23 20:34	1

Surrogate Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-4836-1	SS01	124	89
890-4836-2	SS02	90	92
890-4836-2 MS	SS02	107	93
890-4836-2 MSD	SS02	108	94
890-4836-3	SS03	107	92
890-4836-4	SS04	92	75
890-4836-5	SS05	104	97
890-4836-6	SS06	104	94
890-4836-7	SS07	99	95
890-4836-8	SS08	103	97
LCS 880-56020/1-A	Lab Control Sample	109	97
LCSD 880-56020/2-A	Lab Control Sample Dup	109	88
MB 880-56020/5-A	Method Blank	96	107
MB 880-56064/5-A	Method Blank	106	106

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-4836-1	SS01	111	116
890-4836-2	SS02	110	126
890-4836-3	SS03	132 S1+	135 S1+
890-4836-4	SS04	338 S1+	532 S1+
890-4836-5	SS05	125	137 S1+
890-4836-5 MS	SS05	94	99
890-4836-5 MSD	SS05	106	112
890-4836-6	SS06	94	106
890-4836-7	SS07	112	130
890-4836-8	SS08	102	112
LCS 880-56026/2-A	Lab Control Sample	80	95
LCSD 880-56026/3-A	Lab Control Sample Dup	90	105
MB 880-56026/1-A	Method Blank	120	141 S1+

Surrogate Legend
1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-56020/5-A
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56020

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/21/23 13:48	06/23/23 03:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/21/23 13:48	06/23/23 03:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	06/21/23 13:48	06/23/23 03:01	1
1,4-Difluorobenzene (Surr)	107		70 - 130	06/21/23 13:48	06/23/23 03:01	1

Lab Sample ID: LCS 880-56020/1-A
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1290		mg/Kg		129	70 - 130
Toluene	0.100	0.1315	*+	mg/Kg		131	70 - 130
Ethylbenzene	0.100	0.1183		mg/Kg		118	70 - 130
m-Xylene & p-Xylene	0.200	0.2114		mg/Kg		106	70 - 130
o-Xylene	0.100	0.09951		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-56020/2-A
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1295		mg/Kg		129	70 - 130	0	35
Toluene	0.100	0.1279		mg/Kg		128	70 - 130	3	35
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2161		mg/Kg		108	70 - 130	2	35
o-Xylene	0.100	0.1009		mg/Kg		101	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 890-4836-2 MS
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.0996	0.06434	F1	mg/Kg		65	70 - 130
Toluene	<0.00201	U *+ F1	0.0996	0.04456	F1	mg/Kg		45	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

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

Lab Sample ID: 890-4836-2 MS
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00201	U F1	0.0996	0.03332	F1	mg/Kg		33	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.06017	F1	mg/Kg		30	70 - 130
o-Xylene	<0.00201	U F1	0.0996	0.02881	F1	mg/Kg		29	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-4836-2 MSD
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 56020

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00201	U F1	0.0994	0.05300	F1	mg/Kg		53	70 - 130	19	35
Toluene	<0.00201	U *+ F1	0.0994	0.03512	F1	mg/Kg		35	70 - 130	24	35
Ethylbenzene	<0.00201	U F1	0.0994	0.02817	F1	mg/Kg		28	70 - 130	17	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.05391	F1	mg/Kg		27	70 - 130	11	35
o-Xylene	<0.00201	U F1	0.0994	0.02499	F1	mg/Kg		25	70 - 130	14	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: MB 880-56064/5-A
Matrix: Solid
Analysis Batch: 56082

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56064

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/22/23 11:03	06/22/23 15:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/22/23 11:03	06/22/23 15:21	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	106		70 - 130	06/22/23 11:03	06/22/23 15:21	1
1,4-Difluorobenzene (Surr)	106		70 - 130	06/22/23 11:03	06/22/23 15:21	1

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

Lab Sample ID: MB 880-56026/1-A
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56026

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/21/23 14:55	06/23/23 09:08	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

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

Lab Sample ID: MB 880-56026/1-A
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56026

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/21/23 14:55	06/23/23 09:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/21/23 14:55	06/23/23 09:08	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	120		70 - 130	06/21/23 14:55	06/23/23 09:08	1
o-Terphenyl	141	S1+	70 - 130	06/21/23 14:55	06/23/23 09:08	1

Lab Sample ID: LCS 880-56026/2-A
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56026

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	879.9		mg/Kg		88	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	80		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: LCSD 880-56026/3-A
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56026

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	832.1		mg/Kg		83	70 - 130	6	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	90		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: 890-4836-5 MS
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 56026

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	809.9		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	664.8	F1	mg/Kg		64	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	94		70 - 130
o-Terphenyl	99		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

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

Lab Sample ID: 890-4836-5 MSD
Matrix: Solid
Analysis Batch: 56147

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 56026

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	883.4		mg/Kg		86	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	761.6		mg/Kg		74	70 - 130	14	20
Surrogate	%Recovery	MSD Qualifier		MSD						Limits	
1-Chlorooctane	106									70 - 130	
o-Terphenyl	112									70 - 130	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-55910/1-A
Matrix: Solid
Analysis Batch: 56018

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			06/21/23 19:13	1

Lab Sample ID: LCS 880-55910/2-A
Matrix: Solid
Analysis Batch: 56018

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-55910/3-A
Matrix: Solid
Analysis Batch: 56018

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	249.3		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-4836-1 MS
Matrix: Solid
Analysis Batch: 56018

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4210		2480	6693		mg/Kg		100	90 - 110

Lab Sample ID: 890-4836-1 MSD
Matrix: Solid
Analysis Batch: 56018

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4210		2480	6693		mg/Kg		100	90 - 110	0	20

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
 SDG: 03C1558249

GC VOA

Prep Batch: 56020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	5035	
890-4836-2	SS02	Total/NA	Solid	5035	
890-4836-3	SS03	Total/NA	Solid	5035	
890-4836-4	SS04	Total/NA	Solid	5035	
890-4836-5	SS05	Total/NA	Solid	5035	
890-4836-6	SS06	Total/NA	Solid	5035	
890-4836-7	SS07	Total/NA	Solid	5035	
890-4836-8	SS08	Total/NA	Solid	5035	
MB 880-56020/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-56020/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-56020/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4836-2 MS	SS02	Total/NA	Solid	5035	
890-4836-2 MSD	SS02	Total/NA	Solid	5035	

Prep Batch: 56064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-56064/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 56082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	8021B	56020
890-4836-2	SS02	Total/NA	Solid	8021B	56020
890-4836-3	SS03	Total/NA	Solid	8021B	56020
890-4836-4	SS04	Total/NA	Solid	8021B	56020
890-4836-5	SS05	Total/NA	Solid	8021B	56020
890-4836-6	SS06	Total/NA	Solid	8021B	56020
890-4836-7	SS07	Total/NA	Solid	8021B	56020
890-4836-8	SS08	Total/NA	Solid	8021B	56020
MB 880-56020/5-A	Method Blank	Total/NA	Solid	8021B	56020
MB 880-56064/5-A	Method Blank	Total/NA	Solid	8021B	56064
LCS 880-56020/1-A	Lab Control Sample	Total/NA	Solid	8021B	56020
LCSD 880-56020/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	56020
890-4836-2 MS	SS02	Total/NA	Solid	8021B	56020
890-4836-2 MSD	SS02	Total/NA	Solid	8021B	56020

Analysis Batch: 56211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	Total BTEX	
890-4836-2	SS02	Total/NA	Solid	Total BTEX	
890-4836-3	SS03	Total/NA	Solid	Total BTEX	
890-4836-4	SS04	Total/NA	Solid	Total BTEX	
890-4836-5	SS05	Total/NA	Solid	Total BTEX	
890-4836-6	SS06	Total/NA	Solid	Total BTEX	
890-4836-7	SS07	Total/NA	Solid	Total BTEX	
890-4836-8	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 56026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

GC Semi VOA (Continued)

Prep Batch: 56026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-2	SS02	Total/NA	Solid	8015NM Prep	
890-4836-3	SS03	Total/NA	Solid	8015NM Prep	
890-4836-4	SS04	Total/NA	Solid	8015NM Prep	
890-4836-5	SS05	Total/NA	Solid	8015NM Prep	
890-4836-6	SS06	Total/NA	Solid	8015NM Prep	
890-4836-7	SS07	Total/NA	Solid	8015NM Prep	
890-4836-8	SS08	Total/NA	Solid	8015NM Prep	
MB 880-56026/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-56026/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCS 880-56026/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4836-5 MS	SS05	Total/NA	Solid	8015NM Prep	
890-4836-5 MSD	SS05	Total/NA	Solid	8015NM Prep	

Analysis Batch: 56147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	8015B NM	56026
890-4836-2	SS02	Total/NA	Solid	8015B NM	56026
890-4836-3	SS03	Total/NA	Solid	8015B NM	56026
890-4836-4	SS04	Total/NA	Solid	8015B NM	56026
890-4836-5	SS05	Total/NA	Solid	8015B NM	56026
890-4836-6	SS06	Total/NA	Solid	8015B NM	56026
890-4836-7	SS07	Total/NA	Solid	8015B NM	56026
890-4836-8	SS08	Total/NA	Solid	8015B NM	56026
MB 880-56026/1-A	Method Blank	Total/NA	Solid	8015B NM	56026
LCS 880-56026/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	56026
LCS 880-56026/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	56026
890-4836-5 MS	SS05	Total/NA	Solid	8015B NM	56026
890-4836-5 MSD	SS05	Total/NA	Solid	8015B NM	56026

Analysis Batch: 56351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Total/NA	Solid	8015 NM	
890-4836-2	SS02	Total/NA	Solid	8015 NM	
890-4836-3	SS03	Total/NA	Solid	8015 NM	
890-4836-4	SS04	Total/NA	Solid	8015 NM	
890-4836-5	SS05	Total/NA	Solid	8015 NM	
890-4836-6	SS06	Total/NA	Solid	8015 NM	
890-4836-7	SS07	Total/NA	Solid	8015 NM	
890-4836-8	SS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 55910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Soluble	Solid	DI Leach	
890-4836-2	SS02	Soluble	Solid	DI Leach	
890-4836-3	SS03	Soluble	Solid	DI Leach	
890-4836-4	SS04	Soluble	Solid	DI Leach	
890-4836-5	SS05	Soluble	Solid	DI Leach	
890-4836-6	SS06	Soluble	Solid	DI Leach	
890-4836-7	SS07	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
 SDG: 03C1558249

HPLC/IC (Continued)

Leach Batch: 55910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-8	SS08	Soluble	Solid	DI Leach	
MB 880-55910/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-55910/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-55910/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4836-1 MS	SS01	Soluble	Solid	DI Leach	
890-4836-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 56018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4836-1	SS01	Soluble	Solid	300.0	55910
890-4836-2	SS02	Soluble	Solid	300.0	55910
890-4836-3	SS03	Soluble	Solid	300.0	55910
890-4836-4	SS04	Soluble	Solid	300.0	55910
890-4836-5	SS05	Soluble	Solid	300.0	55910
890-4836-6	SS06	Soluble	Solid	300.0	55910
890-4836-7	SS07	Soluble	Solid	300.0	55910
890-4836-8	SS08	Soluble	Solid	300.0	55910
MB 880-55910/1-A	Method Blank	Soluble	Solid	300.0	55910
LCS 880-55910/2-A	Lab Control Sample	Soluble	Solid	300.0	55910
LCSD 880-55910/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	55910
890-4836-1 MS	SS01	Soluble	Solid	300.0	55910
890-4836-1 MSD	SS01	Soluble	Solid	300.0	55910

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS01

Lab Sample ID: 890-4836-1

Date Collected: 06/19/23 09:25

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	56082	06/23/23 06:13	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	56147	06/23/23 17:58	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	56018	06/21/23 19:30	CH	EET MID

Client Sample ID: SS02

Lab Sample ID: 890-4836-2

Date Collected: 06/19/23 09:30

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 03:30	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 21:05	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	56018	06/21/23 19:48	CH	EET MID

Client Sample ID: SS03

Lab Sample ID: 890-4836-3

Date Collected: 06/19/23 09:35

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 03:50	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 20:19	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	56018	06/21/23 19:53	CH	EET MID

Client Sample ID: SS04

Lab Sample ID: 890-4836-4

Date Collected: 06/19/23 09:40

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	56082	06/23/23 06:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS04

Lab Sample ID: 890-4836-4

Date Collected: 06/19/23 09:40

Matrix: Solid

Date Received: 06/19/23 15:52

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			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	56147	06/23/23 18:22	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 19:59	CH	EET MID

Client Sample ID: SS05

Lab Sample ID: 890-4836-5

Date Collected: 06/19/23 09:55

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 04:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 12:14	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:05	CH	EET MID

Client Sample ID: SS06

Lab Sample ID: 890-4836-6

Date Collected: 06/19/23 10:00

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 04:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 13:22	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:23	CH	EET MID

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 04:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 13:45	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05

Matrix: Solid

Date Received: 06/19/23 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:28	CH	EET MID

Client Sample ID: SS08

Lab Sample ID: 890-4836-8

Date Collected: 06/19/23 10:10

Matrix: Solid

Date Received: 06/19/23 15:52

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	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 05:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 14:08	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:34	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: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

- 1
- 2
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Method Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

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: Hat Mesa 32-2

Job ID: 890-4836-1
SDG: 03C1558249

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4836-1	SS01	Solid	06/19/23 09:25	06/19/23 15:52	0.5
890-4836-2	SS02	Solid	06/19/23 09:30	06/19/23 15:52	0.5
890-4836-3	SS03	Solid	06/19/23 09:35	06/19/23 15:52	0.5
890-4836-4	SS04	Solid	06/19/23 09:40	06/19/23 15:52	0.5
890-4836-5	SS05	Solid	06/19/23 09:55	06/19/23 15:52	0.5
890-4836-6	SS06	Solid	06/19/23 10:00	06/19/23 15:52	0.5
890-4836-7	SS07	Solid	06/19/23 10:05	06/19/23 15:52	0.5
890-4836-8	SS08	Solid	06/19/23 10:10	06/19/23 15:52	0.5

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Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager:	Ben Belli	Bill to: (if different)	Garrett Green
Company Name:	Ensolum	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Green St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-887-2946	Email:	Garrett.Green@ExxonMobil.com

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

Project Name:	Hat Mesa 32-2	Turn Around	Pres. Code
Project Number:	03C1558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location:	Connor Whitman	Due Date:	
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm	
PO #:			
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Parameters
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Thermometer ID:	FWM001
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor:	-0.2
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST	Preservative Codes	Sample Comments
S501	S	6/10/23	925	5'	G	1	CHLORIDES (EPA: 3000.0)	None: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC	Incident ID: NAPP2316046257
S502			930			1	TPH (8015)		
S503			935			1	BTEX (8021)		
S504			940			1			
S505			955			1			
S506			1000			1			
S507			1005			1			
S508			1012			1			

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	6-19-23 15:52			

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 \$3 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4836-1

SDG Number: 03C1558249

Login Number: 4836

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4836-1

SDG Number: 03C1558249

Login Number: 4836

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 06/21/23 10:52 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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 7/31/2023 3:20:45 PM

JOB DESCRIPTION

Hat Mesa 32-2
 SDG NUMBER 03C1558249

JOB NUMBER

890-4946-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



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
7/31/2023 3:20:45 PM

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

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Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-4946-1
SDG: 03C1558249

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Job ID: 890-4946-1

Laboratory: Eurofins Carlsbad**Narrative**

**Job Narrative
890-4946-1****Receipt**

The samples were received on 7/14/2023 1:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH01 (890-4946-1), BH02 (890-4946-2), BH03 (890-4946-3) and BH04 (890-4946-4).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The CCV was biased high for gasoline range hydrocarbons. Another CCV was analyzed and acceptable within 12 hours; therefore, the data was qualified and reported.(CCV 880-58792/58)

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH01 (890-4946-1), BH02 (890-4946-2), BH03 (890-4946-3), BH04 (890-4946-4) and (MB 880-58406/1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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



Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH01

Lab Sample ID: 890-4946-1

Date Collected: 07/14/23 09:30

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 2

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		07/17/23 13:55	07/20/23 14:27	1
Toluene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 14:27	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 14:27	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		07/17/23 13:55	07/20/23 14:27	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 14:27	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		07/17/23 13:55	07/20/23 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	07/17/23 13:55	07/20/23 14:27	1
1,4-Difluorobenzene (Surr)	119		70 - 130	07/17/23 13:55	07/20/23 14:27	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	189		49.5	mg/Kg			07/31/23 16:01	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	<49.5	U	49.5	mg/Kg		07/25/23 13:16	07/31/23 04:34	1
Diesel Range Organics (Over C10-C28)	189		49.5	mg/Kg		07/25/23 13:16	07/31/23 04:34	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5	mg/Kg		07/25/23 13:16	07/31/23 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	147	S1+	70 - 130	07/25/23 13:16	07/31/23 04:34	1
o-Terphenyl	131	S1+	70 - 130	07/25/23 13:16	07/31/23 04:34	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6930		50.0	mg/Kg			07/17/23 20:04	10

Client Sample ID: BH02

Lab Sample ID: 890-4946-2

Date Collected: 07/14/23 10:00

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1.5

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		07/17/23 13:55	07/20/23 16:11	1
Toluene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 16:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 16:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		07/17/23 13:55	07/20/23 16:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		07/17/23 13:55	07/20/23 16:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		07/17/23 13:55	07/20/23 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	07/17/23 13:55	07/20/23 16:11	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH02

Lab Sample ID: 890-4946-2

Date Collected: 07/14/23 10:00

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	07/17/23 13:55	07/20/23 16:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	952		49.9	mg/Kg			07/31/23 16:01	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		07/25/23 13:16	07/31/23 04:13	1
Diesel Range Organics (Over C10-C28)	952		49.9	mg/Kg		07/25/23 13:16	07/31/23 04:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		07/25/23 13:16	07/31/23 04:13	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	134	S1+	70 - 130	07/25/23 13:16	07/31/23 04:13	1		
o-Terphenyl	121		70 - 130	07/25/23 13:16	07/31/23 04:13	1		

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17400		251	mg/Kg			07/17/23 20:09	50

Client Sample ID: BH03

Lab Sample ID: 890-4946-3

Date Collected: 07/14/23 10:10

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 16:46	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		07/17/23 13:55	07/20/23 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	07/17/23 13:55	07/20/23 16:46	1
1,4-Difluorobenzene (Surr)	111		70 - 130	07/17/23 13:55	07/20/23 16:46	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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	79.6		50.2	mg/Kg			07/31/23 16:01	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH03

Lab Sample ID: 890-4946-3

Date Collected: 07/14/23 10:10

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2	mg/Kg		07/25/23 13:16	07/31/23 04:55	1
Diesel Range Organics (Over C10-C28)	79.6		50.2	mg/Kg		07/25/23 13:16	07/31/23 04:55	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		07/25/23 13:16	07/31/23 04:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130			07/25/23 13:16	07/31/23 04:55	1
o-Terphenyl	127		70 - 130			07/25/23 13:16	07/31/23 04:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	931		4.99	mg/Kg			07/17/23 20:14	1

Client Sample ID: BH04

Lab Sample ID: 890-4946-4

Date Collected: 07/14/23 10:20

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/17/23 13:55	07/20/23 17:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			07/17/23 13:55	07/20/23 17:07	1
1,4-Difluorobenzene (Surr)	115		70 - 130			07/17/23 13:55	07/20/23 17:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2720		50.3	mg/Kg			07/31/23 16:01	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	<50.3	U	50.3	mg/Kg		07/25/23 13:16	07/31/23 03:52	1
Diesel Range Organics (Over C10-C28)	2720		50.3	mg/Kg		07/25/23 13:16	07/31/23 03:52	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		07/25/23 13:16	07/31/23 03:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130			07/25/23 13:16	07/31/23 03:52	1
o-Terphenyl	124		70 - 130			07/25/23 13:16	07/31/23 03:52	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH04

Lab Sample ID: 890-4946-4

Date Collected: 07/14/23 10:20

Matrix: Solid

Date Received: 07/14/23 13:00

Sample Depth: 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.0		4.99	mg/Kg			07/17/23 20:19	1

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

Surrogate Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-30743-A-1-D MS	Matrix Spike	104	105
880-30743-A-1-E MSD	Matrix Spike Duplicate	112	104
890-4946-1	BH01	92	119
890-4946-2	BH02	102	106
890-4946-3	BH03	89	111
890-4946-4	BH04	99	115
LCS 880-57844/1-A	Lab Control Sample	95	100
LCS 880-57844/2-A	Lab Control Sample Dup	89	103
MB 880-57844/5-A	Method Blank	83	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-4946-1	BH01	147 S1+	131 S1+
890-4946-2	BH02	134 S1+	121
890-4946-3	BH03	135 S1+	127
890-4946-4	BH04	140 S1+	124
890-4951-A-12-F MS	Matrix Spike	113	93
890-4951-A-12-G MSD	Matrix Spike Duplicate	115	95
LCS 880-58406/2-A	Lab Control Sample	100	109
LCS 880-58406/3-A	Lab Control Sample Dup	100	107
MB 880-58406/1-A	Method Blank	162 S1+	155 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-57844/5-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57844

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/17/23 13:55	07/20/23 11:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	07/17/23 13:55	07/20/23 11:20	1
1,4-Difluorobenzene (Surr)	95		70 - 130	07/17/23 13:55	07/20/23 11:20	1

Lab Sample ID: LCS 880-57844/1-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1031		mg/Kg		103	70 - 130
Toluene	0.100	0.1080		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.09914		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1936		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09607		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-57844/2-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1039		mg/Kg		104	70 - 130	1	35
Toluene	0.100	0.1047		mg/Kg		105	70 - 130	3	35
Ethylbenzene	0.100	0.09470		mg/Kg		95	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1830		mg/Kg		91	70 - 130	6	35
o-Xylene	0.100	0.09070		mg/Kg		91	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-30743-A-1-D MS
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0998	0.1036		mg/Kg		104	70 - 130
Toluene	<0.00202	U	0.0998	0.1039		mg/Kg		104	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

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

Lab Sample ID: 880-30743-A-1-D MS
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits	
	Result	Qualifier		Result	Qualifier					
Ethylbenzene	<0.00202	U	0.0998	0.09181		mg/Kg		92	70 - 130	
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1782		mg/Kg		89	70 - 130	
o-Xylene	<0.00202	U	0.0998	0.09006		mg/Kg		90	70 - 130	
		MS	MS							
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	104		70 - 130							
1,4-Difluorobenzene (Surr)	105		70 - 130							

Lab Sample ID: 880-30743-A-1-E MSD
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 57844

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00202	U	0.0996	0.09653		mg/Kg		97	70 - 130	7	35
Toluene	<0.00202	U	0.0996	0.1066		mg/Kg		107	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0996	0.09743		mg/Kg		98	70 - 130	6	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1934		mg/Kg		97	70 - 130	8	35
o-Xylene	<0.00202	U	0.0996	0.09744		mg/Kg		97	70 - 130	8	35
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	112		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-58406/1-A
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58406

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/24/23 17:42	07/30/23 19:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/24/23 17:42	07/30/23 19:47	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/24/23 17:42	07/30/23 19:47	1
		MB	MB					
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	162	S1+	70 - 130	07/24/23 17:42	07/30/23 19:47	1		
o-Terphenyl	155	S1+	70 - 130	07/24/23 17:42	07/30/23 19:47	1		

Lab Sample ID: LCS 880-58406/2-A
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58406

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	869.2		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	938.4		mg/Kg		94	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

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

Lab Sample ID: LCS 880-58406/2-A
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58406

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	100		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-58406/3-A
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58406

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	864.3		mg/Kg		86	70 - 130	1		20
Diesel Range Organics (Over C10-C28)	1000	921.7		mg/Kg		92	70 - 130	2		20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	100		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-4951-A-12-F MS
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58406

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	748.0		mg/Kg		74	70 - 130	
Diesel Range Organics (Over C10-C28)	255		1010	1047		mg/Kg		79	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	113		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: 890-4951-A-12-G MSD
Matrix: Solid
Analysis Batch: 58792

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 58406

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	755.1		mg/Kg		75	70 - 130	1		20
Diesel Range Organics (Over C10-C28)	255		1010	1061		mg/Kg		80	70 - 130	1		20

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	115		70 - 130
o-Terphenyl	95		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-57836/1-A
Matrix: Solid
Analysis Batch: 57909

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			07/17/23 17:55	1

Lab Sample ID: LCS 880-57836/2-A
Matrix: Solid
Analysis Batch: 57909

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	249.9		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-57836/3-A
Matrix: Solid
Analysis Batch: 57909

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	250.3		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-4943-A-1-B MS
Matrix: Solid
Analysis Batch: 57909

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	1470		1250	2771		mg/Kg		104	90 - 110

Lab Sample ID: 890-4943-A-1-C MSD
Matrix: Solid
Analysis Batch: 57909

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	1470		1250	2778		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-4943-A-11-B MS
Matrix: Solid
Analysis Batch: 57909

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	141		249	383.0		mg/Kg		97	90 - 110

Lab Sample ID: 890-4943-A-11-C MSD
Matrix: Solid
Analysis Batch: 57909

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	141		249	383.1		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

GC VOA

Prep Batch: 57844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	5035	
890-4946-2	BH02	Total/NA	Solid	5035	
890-4946-3	BH03	Total/NA	Solid	5035	
890-4946-4	BH04	Total/NA	Solid	5035	
MB 880-57844/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-57844/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-57844/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-30743-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-30743-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 58089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	8021B	57844
890-4946-2	BH02	Total/NA	Solid	8021B	57844
890-4946-3	BH03	Total/NA	Solid	8021B	57844
890-4946-4	BH04	Total/NA	Solid	8021B	57844
MB 880-57844/5-A	Method Blank	Total/NA	Solid	8021B	57844
LCS 880-57844/1-A	Lab Control Sample	Total/NA	Solid	8021B	57844
LCS 880-57844/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	57844
880-30743-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	57844
880-30743-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	57844

Analysis Batch: 58191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	Total BTEX	
890-4946-2	BH02	Total/NA	Solid	Total BTEX	
890-4946-3	BH03	Total/NA	Solid	Total BTEX	
890-4946-4	BH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 58406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	8015NM Prep	
890-4946-2	BH02	Total/NA	Solid	8015NM Prep	
890-4946-3	BH03	Total/NA	Solid	8015NM Prep	
890-4946-4	BH04	Total/NA	Solid	8015NM Prep	
MB 880-58406/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-58406/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCS 880-58406/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4951-A-12-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4951-A-12-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 58792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	8015B NM	58406
890-4946-2	BH02	Total/NA	Solid	8015B NM	58406
890-4946-3	BH03	Total/NA	Solid	8015B NM	58406
890-4946-4	BH04	Total/NA	Solid	8015B NM	58406
MB 880-58406/1-A	Method Blank	Total/NA	Solid	8015B NM	58406
LCS 880-58406/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	58406

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

GC Semi VOA (Continued)

Analysis Batch: 58792 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-58406/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	58406
890-4951-A-12-F MS	Matrix Spike	Total/NA	Solid	8015B NM	58406
890-4951-A-12-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	58406

Analysis Batch: 58921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Total/NA	Solid	8015 NM	
890-4946-2	BH02	Total/NA	Solid	8015 NM	
890-4946-3	BH03	Total/NA	Solid	8015 NM	
890-4946-4	BH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 57836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Soluble	Solid	DI Leach	
890-4946-2	BH02	Soluble	Solid	DI Leach	
890-4946-3	BH03	Soluble	Solid	DI Leach	
890-4946-4	BH04	Soluble	Solid	DI Leach	
MB 880-57836/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-57836/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-57836/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4943-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4943-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-4943-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4943-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 57909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4946-1	BH01	Soluble	Solid	300.0	57836
890-4946-2	BH02	Soluble	Solid	300.0	57836
890-4946-3	BH03	Soluble	Solid	300.0	57836
890-4946-4	BH04	Soluble	Solid	300.0	57836
MB 880-57836/1-A	Method Blank	Soluble	Solid	300.0	57836
LCS 880-57836/2-A	Lab Control Sample	Soluble	Solid	300.0	57836
LCSD 880-57836/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	57836
890-4943-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	57836
890-4943-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	57836
890-4943-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	57836
890-4943-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	57836

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH01

Lab Sample ID: 890-4946-1

Date Collected: 07/14/23 09:30

Matrix: Solid

Date Received: 07/14/23 13:00

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	57844	07/17/23 13:55	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 14:27	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58191	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58921	07/31/23 16:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	58406	07/25/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58792	07/31/23 04:34	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	57836	07/17/23 11:13	KS	EET MID
Soluble	Analysis	300.0		10			57909	07/17/23 20:04	CH	EET MID

Client Sample ID: BH02

Lab Sample ID: 890-4946-2

Date Collected: 07/14/23 10:00

Matrix: Solid

Date Received: 07/14/23 13:00

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	57844	07/17/23 13:55	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 16:11	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58191	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58921	07/31/23 16:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	58406	07/25/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58792	07/31/23 04:13	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	57836	07/17/23 11:13	KS	EET MID
Soluble	Analysis	300.0		50			57909	07/17/23 20:09	CH	EET MID

Client Sample ID: BH03

Lab Sample ID: 890-4946-3

Date Collected: 07/14/23 10:10

Matrix: Solid

Date Received: 07/14/23 13:00

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	57844	07/17/23 13:55	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 16:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58191	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58921	07/31/23 16:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	58406	07/25/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58792	07/31/23 04:55	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	57836	07/17/23 11:13	KS	EET MID
Soluble	Analysis	300.0		1			57909	07/17/23 20:14	CH	EET MID

Client Sample ID: BH04

Lab Sample ID: 890-4946-4

Date Collected: 07/14/23 10:20

Matrix: Solid

Date Received: 07/14/23 13:00

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	57844	07/17/23 13:55	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 17:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58191	07/21/23 08:26	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Client Sample ID: BH04

Lab Sample ID: 890-4946-4

Date Collected: 07/14/23 10:20

Matrix: Solid

Date Received: 07/14/23 13:00

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			58921	07/31/23 16:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	58406	07/25/23 13:16	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58792	07/31/23 03:52	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	57836	07/17/23 11:13	KS	EET MID
Soluble	Analysis	300.0		1			57909	07/17/23 20:19	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

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	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

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Method Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-4946-1
 SDG: 03C1558249

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: Hat Mesa 32-2

Job ID: 890-4946-1
SDG: 03C1558249

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4946-1	BH01	Solid	07/14/23 09:30	07/14/23 13:00	2
890-4946-2	BH02	Solid	07/14/23 10:00	07/14/23 13:00	1.5
890-4946-3	BH03	Solid	07/14/23 10:10	07/14/23 13:00	1
890-4946-4	BH04	Solid	07/14/23 10:20	07/14/23 13:00	1

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Environment Testing Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Bellill	Bill to: (if different)	Garrett Green
Company Name:	ENSOLUM, LLC	Company Name:	XTO ENERGY
Address:	3122 National Parks Hwy	Address:	3104 E. Green St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	Garrett.Green@XTOEnergy.com

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

Project Name:	Hat Mesa 32-2	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number:	03C 1558249	Due Date:	5 days		
Project Location:	32.53001 - 103.08500	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Marihana O Dell	Temp Blank:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Wet Ice:	<input checked="" type="radio"/> Yes <input type="radio"/> No
P.O. #:		Thermometer ID:	7000007	Correction Factor:	-0.0
		Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.2
		Sample Custody Seals:	Yes No N/A	Corrected Temperature:	2.0
		Total Containers:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters
BH01	S	7/14/23	9:30	2'	G	1	Chlorides X TPH X BTEX X
BH02	S		10:00	15'	G	1	
BH03	S		10:10	1'	G	1	
BH04	S		10:20	1'	G	1	



Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texs 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
<i>M. Bellill</i>	<i>Joe Fry</i>	7-14-23 1300			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4946-1

SDG Number: 03C1558249

Login Number: 4946

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4946-1

SDG Number: 03C1558249

Login Number: 4946

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 07/17/23 10:06 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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 11/13/2023 12:38:26 PM

JOB DESCRIPTION

Hat Mesa 32-2

JOB NUMBER

890-5563-1



Euofins 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
11/13/2023 12:38:26 PM

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

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Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-5563-1

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Eurofins Carlsbad

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Job ID: 890-5563-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-5563-1**

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/3/2023 8:35 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 3.2°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-5563-1), FS02 (890-5563-2), FS03 (890-5563-3), FS04 (890-5563-4), FS05 (890-5563-5), FS06 (890-5563-6), FS07 (890-5563-7), FS08 (890-5563-8), SW01 (890-5563-9), SW02 (890-5563-10), SW03 (890-5563-11), SW04 (890-5563-12), FS09 (890-5563-13), FS10 (890-5563-14), FS11 (890-5563-15), FS12 (890-5563-16), FS13 (890-5563-17), FS14 (890-5563-18), FS15 (890-5563-19), FS16 (890-5563-20), FS17 (890-5563-21), FS18 (890-5563-22), FS19 (890-5563-23) and SW05 (890-5563-24).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66261 and analytical batch 880-66350 was outside the control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS03 (890-5563-3), FS04 (890-5563-4), FS06 (890-5563-6), FS08 (890-5563-8), SW01 (890-5563-9), SW02 (890-5563-10), SW04 (890-5563-12), FS09 (890-5563-13), FS10 (890-5563-14), FS11 (890-5563-15), FS12 (890-5563-16), FS13 (890-5563-17) and (890-5563-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-66320 and analytical batch 880-66350 recovered outside control limits for the following analytes: m-Xylene & p-Xylene. Since only an acceptable LCS or LCSD is required per the method, the LCSD shows recovery for the batch and the data has been qualified and reported.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-66320 and analytical batch 880-66350 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS17 (890-5563-21), FS18 (890-5563-22), FS19 (890-5563-23), (CCV 880-66703/33), (CCV 880-66703/82) and (890-5569-A-21-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-66435 and analytical batch 880-66703 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-5569-A-21-D MS) and (890-5569-A-21-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS15 (890-5563-19) and FS16 (890-5563-20).

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Job ID: 890-5563-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66313 and analytical batch 880-66344 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS01 (890-5563-1), FS02 (890-5563-2), FS03 (890-5563-3), FS04 (890-5563-4), FS06 (890-5563-6), FS07 (890-5563-7) and FS08 (890-5563-8). 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: SW01 (890-5563-9), SW03 (890-5563-11), FS09 (890-5563-13), FS10 (890-5563-14), FS11 (890-5563-15), FS12 (890-5563-16) and FS14 (890-5563-18). 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: (CCV 880-66344/20), (CCV 880-66344/31), (CCV 880-66344/5), (CCV 880-66344/57) and (CCV 880-66344/58). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66315 and analytical batch 880-66346 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS15 (890-5563-19), FS16 (890-5563-20), FS17 (890-5563-21), FS18 (890-5563-22), FS19 (890-5563-23), SW05 (890-5563-24), (890-5563-A-19-B MS) and (890-5563-A-19-C MSD). 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: (CCV 880-66346/20) and (CCV 880-66346/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-66315 and analytical batch 880-66346 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS01

Lab Sample ID: 890-5563-1

Date Collected: 11/01/23 09:20

Matrix: Solid

Date Received: 11/03/23 08:35

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	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/07/23 22:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	11/06/23 17:11	11/07/23 22:03	1
1,4-Difluorobenzene (Surr)	91		70 - 130	11/06/23 17:11	11/07/23 22:03	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/07/23 22:03	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			11/07/23 13:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		11/06/23 16:26	11/07/23 13:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/06/23 16:26	11/07/23 13:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/06/23 16:26	11/07/23 13:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	11/06/23 16:26	11/07/23 13:27	1
o-Terphenyl	125		70 - 130	11/06/23 16:26	11/07/23 13:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		5.02	mg/Kg			11/07/23 23:15	1

Client Sample ID: FS02

Lab Sample ID: 890-5563-2

Date Collected: 11/01/23 09:25

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 22:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:24	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	mg/Kg		11/06/23 17:11	11/07/23 22:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 22:24	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/06/23 17:11	11/07/23 22:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	11/06/23 17:11	11/07/23 22:24	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS02

Lab Sample ID: 890-5563-2

Date Collected: 11/01/23 09:25

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	72		70 - 130	11/06/23 17:11	11/07/23 22:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/07/23 22:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/07/23 13:49	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	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 13:49	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 13:49	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	11/06/23 16:26	11/07/23 13:49	1
o-Terphenyl	127		70 - 130	11/06/23 16:26	11/07/23 13:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.5		5.02	mg/Kg			11/07/23 23:30	1

Client Sample ID: FS03

Lab Sample ID: 890-5563-3

Date Collected: 11/01/23 09:30

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 22:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 22:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 22:44	1
m-Xylene & p-Xylene	<0.00398	U*	0.00398	mg/Kg		11/06/23 17:11	11/07/23 22:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 22:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/07/23 22:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	11/06/23 17:11	11/07/23 22:44	1
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130	11/06/23 17:11	11/07/23 22:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/07/23 22:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	67.6		49.7	mg/Kg			11/07/23 14:11	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS03

Lab Sample ID: 890-5563-3

Date Collected: 11/01/23 09:30

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 16:26	11/07/23 14:11	1
Diesel Range Organics (Over C10-C28)	67.6		49.7	mg/Kg		11/06/23 16:26	11/07/23 14:11	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 14:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	154	S1+	70 - 130			11/06/23 16:26	11/07/23 14:11	1
o-Terphenyl	150	S1+	70 - 130			11/06/23 16:26	11/07/23 14:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	115		4.96	mg/Kg			11/07/23 23:36	1

Client Sample ID: FS04

Lab Sample ID: 890-5563-4

Date Collected: 11/01/23 09:35

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 23:05	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
m-Xylene & p-Xylene	<0.00398	U *	0.00398	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/07/23 23:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130			11/06/23 17:11	11/07/23 23:05	1
1,4-Difluorobenzene (Surr)	52	S1-	70 - 130			11/06/23 17:11	11/07/23 23:05	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/07/23 23:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	110		49.9	mg/Kg			11/07/23 14:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/06/23 16:26	11/07/23 14:32	1
Diesel Range Organics (Over C10-C28)	110		49.9	mg/Kg		11/06/23 16:26	11/07/23 14:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/06/23 16:26	11/07/23 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130			11/06/23 16:26	11/07/23 14:32	1
o-Terphenyl	122		70 - 130			11/06/23 16:26	11/07/23 14:32	1

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS04

Lab Sample ID: 890-5563-4

Date Collected: 11/01/23 09:35

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		4.97	mg/Kg			11/07/23 23:41	1

Client Sample ID: FS05

Lab Sample ID: 890-5563-5

Date Collected: 11/01/23 09:40

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 23:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/07/23 23:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130			11/06/23 17:11	11/07/23 23:25	1
1,4-Difluorobenzene (Surr)	81		70 - 130			11/06/23 17:11	11/07/23 23:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/07/23 23:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/07/23 14:55	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	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 14:55	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 14:55	1
Oll Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 14:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130			11/06/23 16:26	11/07/23 14:55	1
o-Terphenyl	118		70 - 130			11/06/23 16:26	11/07/23 14:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		4.95	mg/Kg			11/07/23 23:46	1

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS06

Lab Sample ID: 890-5563-6

Date Collected: 11/01/23 09:45

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/07/23 23:46	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
m-Xylene & p-Xylene	<0.00402	U **	0.00402	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/07/23 23:46	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/06/23 17:11	11/07/23 23:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/06/23 17:11	11/07/23 23:46	1
1,4-Difluorobenzene (Surr)	56	S1-	70 - 130	11/06/23 17:11	11/07/23 23:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/07/23 23:46	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			11/07/23 15:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 15:17	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 15:17	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130	11/06/23 16:26	11/07/23 15:17	1
o-Terphenyl	131	S1+	70 - 130	11/06/23 16:26	11/07/23 15:17	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67.5		5.05	mg/Kg			11/08/23 00:02	1

Client Sample ID: FS07

Lab Sample ID: 890-5563-7

Date Collected: 11/01/23 09:50

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 00:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 00:06	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/06/23 17:11	11/08/23 00:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	11/06/23 17:11	11/08/23 00:06	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS07

Lab Sample ID: 890-5563-7

Date Collected: 11/01/23 09:50

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	71		70 - 130	11/06/23 17:11	11/08/23 00:06	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/08/23 00:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/07/23 15:38	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	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 15:38	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 15:38	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 15:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130	11/06/23 16:26	11/07/23 15:38	1
o-Terphenyl	139	S1+	70 - 130	11/06/23 16:26	11/07/23 15:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	143		5.03	mg/Kg			11/08/23 00:07	1

Client Sample ID: FS08

Lab Sample ID: 890-5563-8

Date Collected: 11/01/23 09:55

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 00:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:26	1
m-Xylene & p-Xylene	<0.00398	U*	0.00398	mg/Kg		11/06/23 17:11	11/08/23 00:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	11/06/23 17:11	11/08/23 00:26	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130	11/06/23 17:11	11/08/23 00:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/08/23 00:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.1		50.5	mg/Kg			11/07/23 16:00	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS08

Lab Sample ID: 890-5563-8

Date Collected: 11/01/23 09:55

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 16:00	1
Diesel Range Organics (Over C10-C28)	51.1		50.5	mg/Kg		11/06/23 16:26	11/07/23 16:00	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 16:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130			11/06/23 16:26	11/07/23 16:00	1
o-Terphenyl	136	S1+	70 - 130			11/06/23 16:26	11/07/23 16:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.3		5.04	mg/Kg			11/08/23 00:12	1

Client Sample ID: SW01

Lab Sample ID: 890-5563-9

Date Collected: 11/01/23 10:20

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 00:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
m-Xylene & p-Xylene	<0.00398	U *	0.00398	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 00:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/06/23 17:11	11/08/23 00:47	1
1,4-Difluorobenzene (Surr)	59	S1-	70 - 130			11/06/23 17:11	11/08/23 00:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/08/23 00:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/07/23 16:45	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	<50.4	U	50.4	mg/Kg		11/06/23 16:26	11/07/23 16:45	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/06/23 16:26	11/07/23 16:45	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/06/23 16:26	11/07/23 16:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130			11/06/23 16:26	11/07/23 16:45	1
o-Terphenyl	135	S1+	70 - 130			11/06/23 16:26	11/07/23 16:45	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW01

Lab Sample ID: 890-5563-9

Date Collected: 11/01/23 10:20

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.8		5.02	mg/Kg			11/08/23 00:17	1

Client Sample ID: SW02

Lab Sample ID: 890-5563-10

Date Collected: 11/01/23 10:30

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 01:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/08/23 01:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/06/23 17:11	11/08/23 01:07	1
1,4-Difluorobenzene (Surr)	55	S1-	70 - 130			11/06/23 17:11	11/08/23 01:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/08/23 01:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/07/23 17:08	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	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 17:08	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 17:08	1
Oll Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/06/23 16:26	11/07/23 17:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130			11/06/23 16:26	11/07/23 17:08	1
o-Terphenyl	121		70 - 130			11/06/23 16:26	11/07/23 17:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.9		4.99	mg/Kg			11/08/23 00:22	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW03

Lab Sample ID: 890-5563-11

Date Collected: 11/01/23 10:40

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
m-Xylene & p-Xylene	<0.00403	U **	0.00403	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/06/23 17:11	11/08/23 02:29	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/06/23 17:11	11/08/23 02:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	11/06/23 17:11	11/08/23 02:29	1
1,4-Difluorobenzene (Surr)	72		70 - 130	11/06/23 17:11	11/08/23 02:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/08/23 02:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	76.3		49.7	mg/Kg			11/07/23 17:30	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		11/06/23 16:26	11/07/23 17:30	1
Diesel Range Organics (Over C10-C28)	76.3		49.7	mg/Kg		11/06/23 16:26	11/07/23 17:30	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:26	11/07/23 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130	11/06/23 16:26	11/07/23 17:30	1
o-Terphenyl	137	S1+	70 - 130	11/06/23 16:26	11/07/23 17:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		4.97	mg/Kg			11/08/23 00:28	1

Client Sample ID: SW04

Lab Sample ID: 890-5563-12

Date Collected: 11/01/23 10:50

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 02:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 02:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 02:50	1
m-Xylene & p-Xylene	<0.00398	U **	0.00398	mg/Kg		11/06/23 17:11	11/08/23 02:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 02:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	11/06/23 17:11	11/08/23 02:50	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW04

Lab Sample ID: 890-5563-12

Date Collected: 11/01/23 10:50

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130	11/06/23 17:11	11/08/23 02:50	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			11/08/23 02:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	88.9		50.3	mg/Kg			11/07/23 17:53	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	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 17:53	1
Diesel Range Organics (Over C10-C28)	88.9		50.3	mg/Kg		11/06/23 16:26	11/07/23 17:53	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 17:53	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	127		70 - 130	11/06/23 16:26	11/07/23 17:53	1		
o-Terphenyl	124		70 - 130	11/06/23 16:26	11/07/23 17:53	1		

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		5.05	mg/Kg			11/08/23 00:43	1

Client Sample ID: FS09

Lab Sample ID: 890-5563-13

Date Collected: 11/02/23 11:30

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 03:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 03:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 03:10	1
m-Xylene & p-Xylene	<0.00398	U*	0.00398	mg/Kg		11/06/23 17:11	11/08/23 03:10	1
o-Xylene	0.00223		0.00199	mg/Kg		11/06/23 17:11	11/08/23 03:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 03:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	11/06/23 17:11	11/08/23 03:10	1
1,4-Difluorobenzene (Surr)	54	S1-	70 - 130	11/06/23 17:11	11/08/23 03:10	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			11/08/23 03:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/07/23 18:14	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS09

Lab Sample ID: 890-5563-13

Date Collected: 11/02/23 11:30

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 18:14	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 18:14	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/06/23 16:26	11/07/23 18:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	160	S1+	70 - 130			11/06/23 16:26	11/07/23 18:14	1
o-Terphenyl	148	S1+	70 - 130			11/06/23 16:26	11/07/23 18:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		4.97	mg/Kg			11/08/23 00:48	1

Client Sample ID: FS10

Lab Sample ID: 890-5563-14

Date Collected: 11/02/23 11:35

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 03:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
m-Xylene & p-Xylene	<0.00399	U *	0.00399	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/08/23 03:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			11/06/23 17:11	11/08/23 03:31	1
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130			11/06/23 17:11	11/08/23 03:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/08/23 03:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/07/23 18:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 18:36	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 18:36	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/06/23 16:26	11/07/23 18:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130			11/06/23 16:26	11/07/23 18:36	1
o-Terphenyl	129		70 - 130			11/06/23 16:26	11/07/23 18:36	1

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS10

Lab Sample ID: 890-5563-14

Date Collected: 11/02/23 11:35

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		5.05	mg/Kg			11/08/23 01:04	1

Client Sample ID: FS11

Lab Sample ID: 890-5563-15

Date Collected: 11/02/23 11:40

Matrix: Solid

Date Received: 11/03/23 08:35

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		11/06/23 17:11	11/08/23 03:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/06/23 17:11	11/08/23 03:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130			11/06/23 17:11	11/08/23 03:51	1
1,4-Difluorobenzene (Surr)	93		70 - 130			11/06/23 17:11	11/08/23 03:51	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/08/23 03:51	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			11/07/23 18:57	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	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 18:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 18:57	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 18:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	152	S1+	70 - 130			11/06/23 16:26	11/07/23 18:57	1
o-Terphenyl	142	S1+	70 - 130			11/06/23 16:26	11/07/23 18:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	108		5.00	mg/Kg			11/08/23 01:09	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS12

Lab Sample ID: 890-5563-16

Date Collected: 11/02/23 12:25

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 04:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:12	1
m-Xylene & p-Xylene	<0.00400	U **	0.00400	mg/Kg		11/06/23 17:11	11/08/23 04:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/06/23 17:11	11/08/23 04:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	11/06/23 17:11	11/08/23 04:12	1
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130	11/06/23 17:11	11/08/23 04:12	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			11/08/23 04:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	91.5		49.9	mg/Kg			11/07/23 19:19	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		11/06/23 16:26	11/07/23 19:19	1
Diesel Range Organics (Over C10-C28)	91.5		49.9	mg/Kg		11/06/23 16:26	11/07/23 19:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/06/23 16:26	11/07/23 19:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	11/06/23 16:26	11/07/23 19:19	1
o-Terphenyl	127		70 - 130	11/06/23 16:26	11/07/23 19:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	105		5.05	mg/Kg			11/08/23 01:14	1

Client Sample ID: FS13

Lab Sample ID: 890-5563-17

Date Collected: 11/02/23 12:30

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 04:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:32	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		11/06/23 17:11	11/08/23 04:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/08/23 04:32	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/06/23 17:11	11/08/23 04:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	11/06/23 17:11	11/08/23 04:32	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS13

Lab Sample ID: 890-5563-17

Date Collected: 11/02/23 12:30

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	54	S1-	70 - 130	11/06/23 17:11	11/08/23 04:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/08/23 04:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	70.8		50.2	mg/Kg			11/07/23 19:40	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	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 19:40	1
Diesel Range Organics (Over C10-C28)	70.8		50.2	mg/Kg		11/06/23 16:26	11/07/23 19:40	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 19:40	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	125		70 - 130	11/06/23 16:26	11/07/23 19:40	1		
o-Terphenyl	113		70 - 130	11/06/23 16:26	11/07/23 19:40	1		

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	132		4.99	mg/Kg			11/08/23 01:20	1

Client Sample ID: FS14

Lab Sample ID: 890-5563-18

Date Collected: 11/02/23 12:35

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 04:53	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/08/23 04:53	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/08/23 04:53	1
m-Xylene & p-Xylene	<0.00402	U*	0.00402	mg/Kg		11/06/23 17:11	11/08/23 04:53	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/06/23 17:11	11/08/23 04:53	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/06/23 17:11	11/08/23 04:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/06/23 17:11	11/08/23 04:53	1
1,4-Difluorobenzene (Surr)	77		70 - 130	11/06/23 17:11	11/08/23 04:53	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/08/23 04:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			11/07/23 20:02	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS14

Lab Sample ID: 890-5563-18

Date Collected: 11/02/23 12:35

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 20:02	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 20:02	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		11/06/23 16:26	11/07/23 20:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	139	S1+	70 - 130			11/06/23 16:26	11/07/23 20:02	1
o-Terphenyl	130		70 - 130			11/06/23 16:26	11/07/23 20:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	187		5.01	mg/Kg			11/08/23 01:25	1

Client Sample ID: FS15

Lab Sample ID: 890-5563-19

Date Collected: 11/02/23 12:40

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 05:13	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
m-Xylene & p-Xylene	<0.00398	U *	0.00398	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 05:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/06/23 17:11	11/08/23 05:13	1
1,4-Difluorobenzene (Surr)	63	S1-	70 - 130			11/06/23 17:11	11/08/23 05:13	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/08/23 05:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.3		50.5	mg/Kg			11/07/23 11:59	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	<50.5	U	50.5	mg/Kg		11/06/23 16:30	11/07/23 11:59	1
Diesel Range Organics (Over C10-C28)	56.3	*1	50.5	mg/Kg		11/06/23 16:30	11/07/23 11:59	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/06/23 16:30	11/07/23 11:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130			11/06/23 16:30	11/07/23 11:59	1
o-Terphenyl	160	S1+	70 - 130			11/06/23 16:30	11/07/23 11:59	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS15

Lab Sample ID: 890-5563-19

Date Collected: 11/02/23 12:40

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	236		5.02	mg/Kg			11/08/23 01:30	1

Client Sample ID: FS16

Lab Sample ID: 890-5563-20

Date Collected: 11/02/23 12:45

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 17:11	11/08/23 05:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/06/23 17:11	11/08/23 05:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			11/06/23 17:11	11/08/23 05:33	1
1,4-Difluorobenzene (Surr)	52	S1-	70 - 130			11/06/23 17:11	11/08/23 05:33	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/08/23 05:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	231		49.7	mg/Kg			11/07/23 13:05	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		11/06/23 16:30	11/07/23 13:05	1
Diesel Range Organics (Over C10-C28)	231	*1	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:05	1
Oll Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130			11/06/23 16:30	11/07/23 13:05	1
o-Terphenyl	167	S1+	70 - 130			11/06/23 16:30	11/07/23 13:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		4.95	mg/Kg			11/08/23 01:35	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS17

Lab Sample ID: 890-5563-21

Date Collected: 11/02/23 12:50

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/08/23 12:08	11/12/23 02:11	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/08/23 12:08	11/12/23 02:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/08/23 12:08	11/12/23 02:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/08/23 12:08	11/12/23 02:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/08/23 12:08	11/12/23 02:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/08/23 12:08	11/12/23 02:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	11/08/23 12:08	11/12/23 02:11	1
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130	11/08/23 12:08	11/12/23 02:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/12/23 02:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	187		49.7	mg/Kg			11/07/23 13:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:27	1
Diesel Range Organics (Over C10-C28)	187	*1	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:27	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/06/23 16:30	11/07/23 13:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	159	S1+	70 - 130	11/06/23 16:30	11/07/23 13:27	1
o-Terphenyl	180	S1+	70 - 130	11/06/23 16:30	11/07/23 13:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		5.00	mg/Kg			11/08/23 08:22	1

Client Sample ID: FS18

Lab Sample ID: 890-5563-22

Date Collected: 11/02/23 12:55

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/08/23 12:02	11/12/23 02:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/08/23 12:02	11/12/23 02:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/08/23 12:02	11/12/23 02:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/08/23 12:02	11/12/23 02:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/08/23 12:02	11/12/23 02:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/08/23 12:02	11/12/23 02:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130	11/08/23 12:02	11/12/23 02:37	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS18

Lab Sample ID: 890-5563-22

Date Collected: 11/02/23 12:55

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	11/08/23 12:02	11/12/23 02:37	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/12/23 02:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	114		50.4	mg/Kg			11/07/23 13:49	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	<50.4	U	50.4	mg/Kg		11/06/23 16:30	11/07/23 13:49	1
Diesel Range Organics (Over C10-C28)	114	*1	50.4	mg/Kg		11/06/23 16:30	11/07/23 13:49	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/06/23 16:30	11/07/23 13:49	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	150	S1+	70 - 130	11/06/23 16:30	11/07/23 13:49	1		
o-Terphenyl	172	S1+	70 - 130	11/06/23 16:30	11/07/23 13:49	1		

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88.5		5.00	mg/Kg			11/08/23 08:38	1

Client Sample ID: FS19

Lab Sample ID: 890-5563-23

Date Collected: 11/02/23 13:00

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/08/23 12:08	11/12/23 03:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:08	11/12/23 03:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:08	11/12/23 03:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/08/23 12:08	11/12/23 03:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:08	11/12/23 03:03	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/08/23 12:08	11/12/23 03:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130	11/08/23 12:08	11/12/23 03:03	1
1,4-Difluorobenzene (Surr)	107		70 - 130	11/08/23 12:08	11/12/23 03:03	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/12/23 03:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	104		49.8	mg/Kg			11/07/23 14:11	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS19

Lab Sample ID: 890-5563-23

Date Collected: 11/02/23 13:00

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 3

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		11/06/23 16:30	11/07/23 14:11	1
Diesel Range Organics (Over C10-C28)	104	*1	49.8	mg/Kg		11/06/23 16:30	11/07/23 14:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/06/23 16:30	11/07/23 14:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130			11/06/23 16:30	11/07/23 14:11	1
o-Terphenyl	154	S1+	70 - 130			11/06/23 16:30	11/07/23 14:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.4		5.02	mg/Kg			11/08/23 08:43	1

Client Sample ID: SW05

Lab Sample ID: 890-5563-24

Date Collected: 11/02/23 14:00

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-3

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		11/08/23 12:02	11/12/23 03:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/08/23 12:02	11/12/23 03:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130			11/08/23 12:02	11/12/23 03:30	1
1,4-Difluorobenzene (Surr)	73		70 - 130			11/08/23 12:02	11/12/23 03:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/12/23 03:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	149		49.6	mg/Kg			11/07/23 14:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		11/06/23 16:30	11/07/23 14:32	1
Diesel Range Organics (Over C10-C28)	149	*1	49.6	mg/Kg		11/06/23 16:30	11/07/23 14:32	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/06/23 16:30	11/07/23 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	147	S1+	70 - 130			11/06/23 16:30	11/07/23 14:32	1
o-Terphenyl	167	S1+	70 - 130			11/06/23 16:30	11/07/23 14:32	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW05

Lab Sample ID: 890-5563-24

Date Collected: 11/02/23 14:00

Matrix: Solid

Date Received: 11/03/23 08:35

Sample Depth: 0-3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.0		5.02	mg/Kg			11/08/23 08:48	1

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

Surrogate Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-5563-1	FS01	77	91
890-5563-1 MS	FS01	123	110
890-5563-1 MSD	FS01	137 S1+	113
890-5563-2	FS02	74	72
890-5563-3	FS03	70	64 S1-
890-5563-4	FS04	80	52 S1-
890-5563-5	FS05	71	81
890-5563-6	FS06	88	56 S1-
890-5563-7	FS07	87	71
890-5563-8	FS08	87	66 S1-
890-5563-9	SW01	87	59 S1-
890-5563-10	SW02	87	55 S1-
890-5563-11	SW03	85	72
890-5563-12	SW04	86	66 S1-
890-5563-13	FS09	92	54 S1-
890-5563-14	FS10	90	67 S1-
890-5563-15	FS11	77	93
890-5563-16	FS12	85	64 S1-
890-5563-17	FS13	83	54 S1-
890-5563-18	FS14	88	77
890-5563-19	FS15	87	63 S1-
890-5563-20	FS16	90	52 S1-
890-5563-21	FS17	82	64 S1-
890-5563-22	FS18	164 S1+	90
890-5563-23	FS19	139 S1+	107
890-5563-24	SW05	130	73
890-5569-A-21-D MS	Matrix Spike	132 S1+	68 S1-
890-5569-A-21-E MSD	Matrix Spike Duplicate	153 S1+	89
LCS 880-66320/1-A	Lab Control Sample	125	120
LCS 880-66435/1-A	Lab Control Sample	113	83
LCS 880-66320/2-A	Lab Control Sample Dup	128	118
LCS 880-66435/2-A	Lab Control Sample Dup	124	75
MB 880-66261/5-A	Method Blank	69 S1-	99
MB 880-66320/5-A	Method Blank	72	80
MB 880-66434/5-A	Method Blank	81	79
MB 880-66435/5-A	Method Blank	76	71

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5563-1	FS01	133 S1+	125
890-5563-2	FS02	135 S1+	127
890-5563-3	FS03	154 S1+	150 S1+

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Surrogate Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5563-4	FS04	135 S1+	122
890-5563-5	FS05	127	118
890-5563-6	FS06	142 S1+	131 S1+
890-5563-7	FS07	144 S1+	139 S1+
890-5563-8	FS08	142 S1+	136 S1+
890-5563-9	SW01	145 S1+	135 S1+
890-5563-10	SW02	127	121
890-5563-11	SW03	144 S1+	137 S1+
890-5563-12	SW04	127	124
890-5563-13	FS09	160 S1+	148 S1+
890-5563-14	FS10	136 S1+	129
890-5563-15	FS11	152 S1+	142 S1+
890-5563-16	FS12	135 S1+	127
890-5563-17	FS13	125	113
890-5563-18	FS14	139 S1+	130
890-5563-19	FS15	135 S1+	160 S1+
890-5563-19 MS	FS15	132 S1+	131 S1+
890-5563-19 MSD	FS15	130	132 S1+
890-5563-20	FS16	145 S1+	167 S1+
890-5563-21	FS17	159 S1+	180 S1+
890-5563-22	FS18	150 S1+	172 S1+
890-5563-23	FS19	134 S1+	154 S1+
890-5563-24	SW05	147 S1+	167 S1+
890-5566-A-8-C MS	Matrix Spike	126	109
890-5566-A-8-D MSD	Matrix Spike Duplicate	127	110
LCS 880-66313/2-A	Lab Control Sample	105	114
LCS 880-66315/2-A	Lab Control Sample	86	105
LCSD 880-66313/3-A	Lab Control Sample Dup	90	97
LCSD 880-66315/3-A	Lab Control Sample Dup	98	118
MB 880-66313/1-A	Method Blank	246 S1+	245 S1+
MB 880-66315/1-A	Method Blank	243 S1+	301 S1+

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66261/5-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66261

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 11:26	11/07/23 11:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/06/23 11:26	11/07/23 11:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130	11/06/23 11:26	11/07/23 11:06	1
1,4-Difluorobenzene (Surr)	99		70 - 130	11/06/23 11:26	11/07/23 11:06	1

Lab Sample ID: MB 880-66320/5-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66320

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/06/23 17:11	11/07/23 21:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/06/23 17:11	11/07/23 21:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	11/06/23 17:11	11/07/23 21:42	1
1,4-Difluorobenzene (Surr)	80		70 - 130	11/06/23 17:11	11/07/23 21:42	1

Lab Sample ID: LCS 880-66320/1-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1223		mg/Kg		122	70 - 130
Toluene	0.100	0.1179		mg/Kg		118	70 - 130
Ethylbenzene	0.100	0.1234		mg/Kg		123	70 - 130
m-Xylene & p-Xylene	0.200	0.2621	*+	mg/Kg		131	70 - 130
o-Xylene	0.100	0.1253		mg/Kg		125	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

Lab Sample ID: LCSD 880-66320/2-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1070		mg/Kg		107	70 - 130	13	35

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: LCSD 880-66320/2-A
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Toluene	0.100	0.1060		mg/Kg		106	70 - 130	11	35
Ethylbenzene	0.100	0.1153		mg/Kg		115	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2471		mg/Kg		124	70 - 130	6	35
o-Xylene	0.100	0.1190		mg/Kg		119	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: 890-5563-1 MS
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0996	0.06658	F1	mg/Kg		67	70 - 130		
Toluene	<0.00200	U	0.0996	0.07324		mg/Kg		74	70 - 130		
Ethylbenzene	<0.00200	U	0.0996	0.08149		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00399	U **	0.199	0.1674		mg/Kg		84	70 - 130		
o-Xylene	<0.00200	U	0.0996	0.07977		mg/Kg		80	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-5563-1 MSD
Matrix: Solid
Analysis Batch: 66350

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 66320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0994	0.07596		mg/Kg		76	70 - 130	13	35
Toluene	<0.00200	U	0.0994	0.08122		mg/Kg		82	70 - 130	10	35
Ethylbenzene	<0.00200	U	0.0994	0.09335		mg/Kg		94	70 - 130	14	35
m-Xylene & p-Xylene	<0.00399	U **	0.199	0.1936		mg/Kg		97	70 - 130	15	35
o-Xylene	<0.00200	U	0.0994	0.09287		mg/Kg		93	70 - 130	15	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: MB 880-66434/5-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66434

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/23 15:54	11/11/23 04:38	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: MB 880-66434/5-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66434

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130			11/07/23 15:54	11/11/23 04:38	1
1,4-Difluorobenzene (Surr)	79		70 - 130			11/07/23 15:54	11/11/23 04:38	1

Lab Sample ID: MB 880-66435/5-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66435

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/23 15:55	11/11/23 18:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130			11/07/23 15:55	11/11/23 18:17	1
1,4-Difluorobenzene (Surr)	71		70 - 130			11/07/23 15:55	11/11/23 18:17	1

Lab Sample ID: LCS 880-66435/1-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66435

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	0.100	0.1094		mg/Kg		109	70 - 130
Toluene	0.100	0.1112		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1031		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.2001		mg/Kg		100	70 - 130
o-Xylene	0.100	0.1053		mg/Kg		105	70 - 130
Surrogate	LCS LCS		Limits				
%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	113		70 - 130				
1,4-Difluorobenzene (Surr)	83		70 - 130				

Lab Sample ID: LCSD 880-66435/2-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66435

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.1110		mg/Kg		111	70 - 130	1	35
Toluene	0.100	0.1078		mg/Kg		108	70 - 130	3	35
Ethylbenzene	0.100	0.1151		mg/Kg		115	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.2296		mg/Kg		115	70 - 130	14	35
o-Xylene	0.100	0.1224		mg/Kg		122	70 - 130	15	35

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	75		70 - 130

Lab Sample ID: 890-5569-A-21-D MS
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66435

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.00201	U	0.101	0.08876		mg/Kg		88		70 - 130
Toluene	<0.00201	U F2 F1	0.101	0.07431		mg/Kg		74		70 - 130
Ethylbenzene	<0.00201	U F2 F1	0.101	0.07440		mg/Kg		74		70 - 130
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.202	0.1432		mg/Kg		71		70 - 130
o-Xylene	<0.00201	U F2 F1	0.101	0.09014		mg/Kg		89		70 - 130

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130

Lab Sample ID: 890-5569-A-21-E MSD
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66435

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec	Limits	RPD	
	Result	Qualifier	Added	Result	Qualifier						RPD	Limit
Benzene	<0.00201	U	0.0996	0.07067		mg/Kg		71		70 - 130	23	35
Toluene	<0.00201	U F2 F1	0.0996	0.02247	F2 F1	mg/Kg		23		70 - 130	107	35
Ethylbenzene	<0.00201	U F2 F1	0.0996	0.02605	F2 F1	mg/Kg		26		70 - 130	96	35
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.199	0.05428	F2 F1	mg/Kg		27		70 - 130	90	35
o-Xylene	<0.00201	U F2 F1	0.0996	0.06237	F2 F1	mg/Kg		63		70 - 130	36	35

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	153	S1+	70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-66313/1-A
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66313

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 09:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 09:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 09:24	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	246	S1+	70 - 130	11/06/23 16:26	11/07/23 09:24	1
o-Terphenyl	245	S1+	70 - 130	11/06/23 16:26	11/07/23 09:24	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: LCS 880-66313/2-A
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1009		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	946.0		mg/Kg		95	70 - 130		
		LCS	LCS						
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	114		70 - 130						

Lab Sample ID: LCSD 880-66313/3-A
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
									RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	873.7		mg/Kg		87	70 - 130		14	20
Diesel Range Organics (Over C10-C28)	1000	799.8		mg/Kg		80	70 - 130		17	20
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	90		70 - 130							
o-Terphenyl	97		70 - 130							

Lab Sample ID: 890-5566-A-8-C MS
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	1233		mg/Kg		121	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1128		mg/Kg		111	70 - 130	
		MS	MS							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	126		70 - 130							
o-Terphenyl	109		70 - 130							

Lab Sample ID: 890-5566-A-8-D MSD
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
											RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	1249		mg/Kg		123	70 - 130		1	20
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1143		mg/Kg		112	70 - 130		1	20
		MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	127		70 - 130									

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: 890-5566-A-8-D MSD
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66313

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	110		70 - 130

Lab Sample ID: MB 880-66315/1-A
Matrix: Solid
Analysis Batch: 66346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66315

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/06/23 16:30	11/07/23 09:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/06/23 16:30	11/07/23 09:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/06/23 16:30	11/07/23 09:02	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>1</i> -Chlorooctane	243	S1+	70 - 130	11/06/23 16:30	11/07/23 09:02	1
<i>o</i> -Terphenyl	301	S1+	70 - 130	11/06/23 16:30	11/07/23 09:02	1

Lab Sample ID: LCS 880-66315/2-A
Matrix: Solid
Analysis Batch: 66346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66315

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	841.4		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	837.2		mg/Kg		84	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>1</i> -Chlorooctane	86		70 - 130
<i>o</i> -Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-66315/3-A
Matrix: Solid
Analysis Batch: 66346

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66315

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1028		mg/Kg		103	70 - 130	20	20
Diesel Range Organics (Over C10-C28)	1000	1036	*1	mg/Kg		104	70 - 130	21	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>1</i> -Chlorooctane	98		70 - 130
<i>o</i> -Terphenyl	118		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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

Lab Sample ID: 890-5563-19 MS
Matrix: Solid
Analysis Batch: 66346

Client Sample ID: FS15
Prep Type: Total/NA
Prep Batch: 66315

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	1010	937.0		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	56.3	*1	1010	1092		mg/Kg		103	70 - 130
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	132	S1+	70 - 130						
o-Terphenyl	131	S1+	70 - 130						

Lab Sample ID: 890-5563-19 MSD
Matrix: Solid
Analysis Batch: 66346

Client Sample ID: FS15
Prep Type: Total/NA
Prep Batch: 66315

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	<50.5	U	1010	899.8		mg/Kg		89	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	56.3	*1	1010	1102		mg/Kg		103	70 - 130	1	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	130		70 - 130								
o-Terphenyl	132	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66491/1-A
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/07/23 22:59	1

Lab Sample ID: LCS 880-66491/2-A
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	263.2		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-66491/3-A
Matrix: Solid
Analysis Batch: 66492

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	264.1		mg/Kg		106	90 - 110	0	20

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-5563-1 MS
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	101		251	363.4		mg/Kg		105	90 - 110

Lab Sample ID: 890-5563-1 MSD
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	101		251	355.3		mg/Kg		101	90 - 110	2	20

Lab Sample ID: 890-5563-11 MS
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: SW03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	109		249	370.7		mg/Kg		105	90 - 110

Lab Sample ID: 890-5563-11 MSD
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: SW03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	109		249	372.2		mg/Kg		106	90 - 110	0	20

Lab Sample ID: MB 880-66356/1-A
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/08/23 08:06	1

Lab Sample ID: LCS 880-66356/2-A
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	259.5		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-66356/3-A
Matrix: Solid
Analysis Batch: 66512

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	260.4		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-5563-21 MS
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: FS17
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	127		250	382.5		mg/Kg		102	90 - 110

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-5563-21 MSD
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: FS17
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	127		250	374.8		mg/Kg		99	90 - 110	2	20

- 1
- 2
- 3
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- 9
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- 11
- 12
- 13
- 14

QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC VOA

Prep Batch: 66261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66261/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 66320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	5035	
890-5563-2	FS02	Total/NA	Solid	5035	
890-5563-3	FS03	Total/NA	Solid	5035	
890-5563-4	FS04	Total/NA	Solid	5035	
890-5563-5	FS05	Total/NA	Solid	5035	
890-5563-6	FS06	Total/NA	Solid	5035	
890-5563-7	FS07	Total/NA	Solid	5035	
890-5563-8	FS08	Total/NA	Solid	5035	
890-5563-9	SW01	Total/NA	Solid	5035	
890-5563-10	SW02	Total/NA	Solid	5035	
890-5563-11	SW03	Total/NA	Solid	5035	
890-5563-12	SW04	Total/NA	Solid	5035	
890-5563-13	FS09	Total/NA	Solid	5035	
890-5563-14	FS10	Total/NA	Solid	5035	
890-5563-15	FS11	Total/NA	Solid	5035	
890-5563-16	FS12	Total/NA	Solid	5035	
890-5563-17	FS13	Total/NA	Solid	5035	
890-5563-18	FS14	Total/NA	Solid	5035	
890-5563-19	FS15	Total/NA	Solid	5035	
890-5563-20	FS16	Total/NA	Solid	5035	
MB 880-66320/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66320/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66320/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5563-1 MS	FS01	Total/NA	Solid	5035	
890-5563-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 66350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	8021B	66320
890-5563-2	FS02	Total/NA	Solid	8021B	66320
890-5563-3	FS03	Total/NA	Solid	8021B	66320
890-5563-4	FS04	Total/NA	Solid	8021B	66320
890-5563-5	FS05	Total/NA	Solid	8021B	66320
890-5563-6	FS06	Total/NA	Solid	8021B	66320
890-5563-7	FS07	Total/NA	Solid	8021B	66320
890-5563-8	FS08	Total/NA	Solid	8021B	66320
890-5563-9	SW01	Total/NA	Solid	8021B	66320
890-5563-10	SW02	Total/NA	Solid	8021B	66320
890-5563-11	SW03	Total/NA	Solid	8021B	66320
890-5563-12	SW04	Total/NA	Solid	8021B	66320
890-5563-13	FS09	Total/NA	Solid	8021B	66320
890-5563-14	FS10	Total/NA	Solid	8021B	66320
890-5563-15	FS11	Total/NA	Solid	8021B	66320
890-5563-16	FS12	Total/NA	Solid	8021B	66320
890-5563-17	FS13	Total/NA	Solid	8021B	66320
890-5563-18	FS14	Total/NA	Solid	8021B	66320
890-5563-19	FS15	Total/NA	Solid	8021B	66320

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC VOA (Continued)

Analysis Batch: 66350 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-20	FS16	Total/NA	Solid	8021B	66320
MB 880-66261/5-A	Method Blank	Total/NA	Solid	8021B	66261
MB 880-66320/5-A	Method Blank	Total/NA	Solid	8021B	66320
LCS 880-66320/1-A	Lab Control Sample	Total/NA	Solid	8021B	66320
LCSD 880-66320/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66320
890-5563-1 MS	FS01	Total/NA	Solid	8021B	66320
890-5563-1 MSD	FS01	Total/NA	Solid	8021B	66320

Prep Batch: 66434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66434/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 66435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21	FS17	Total/NA	Solid	5035	
890-5563-22	FS18	Total/NA	Solid	5035	
890-5563-23	FS19	Total/NA	Solid	5035	
890-5563-24	SW05	Total/NA	Solid	5035	
MB 880-66435/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66435/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66435/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5569-A-21-D MS	Matrix Spike	Total/NA	Solid	5035	
890-5569-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 66531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	Total BTEX	
890-5563-2	FS02	Total/NA	Solid	Total BTEX	
890-5563-3	FS03	Total/NA	Solid	Total BTEX	
890-5563-4	FS04	Total/NA	Solid	Total BTEX	
890-5563-5	FS05	Total/NA	Solid	Total BTEX	
890-5563-6	FS06	Total/NA	Solid	Total BTEX	
890-5563-7	FS07	Total/NA	Solid	Total BTEX	
890-5563-8	FS08	Total/NA	Solid	Total BTEX	
890-5563-9	SW01	Total/NA	Solid	Total BTEX	
890-5563-10	SW02	Total/NA	Solid	Total BTEX	
890-5563-11	SW03	Total/NA	Solid	Total BTEX	
890-5563-12	SW04	Total/NA	Solid	Total BTEX	
890-5563-13	FS09	Total/NA	Solid	Total BTEX	
890-5563-14	FS10	Total/NA	Solid	Total BTEX	
890-5563-15	FS11	Total/NA	Solid	Total BTEX	
890-5563-16	FS12	Total/NA	Solid	Total BTEX	
890-5563-17	FS13	Total/NA	Solid	Total BTEX	
890-5563-18	FS14	Total/NA	Solid	Total BTEX	
890-5563-19	FS15	Total/NA	Solid	Total BTEX	
890-5563-20	FS16	Total/NA	Solid	Total BTEX	
890-5563-21	FS17	Total/NA	Solid	Total BTEX	
890-5563-22	FS18	Total/NA	Solid	Total BTEX	
890-5563-23	FS19	Total/NA	Solid	Total BTEX	
890-5563-24	SW05	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC VOA

Analysis Batch: 66703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21	FS17	Total/NA	Solid	8021B	66435
890-5563-22	FS18	Total/NA	Solid	8021B	66435
890-5563-23	FS19	Total/NA	Solid	8021B	66435
890-5563-24	SW05	Total/NA	Solid	8021B	66435
MB 880-66434/5-A	Method Blank	Total/NA	Solid	8021B	66434
MB 880-66435/5-A	Method Blank	Total/NA	Solid	8021B	66435
LCS 880-66435/1-A	Lab Control Sample	Total/NA	Solid	8021B	66435
LCSD 880-66435/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66435
890-5569-A-21-D MS	Matrix Spike	Total/NA	Solid	8021B	66435
890-5569-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	66435

GC Semi VOA

Prep Batch: 66313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	8015NM Prep	
890-5563-2	FS02	Total/NA	Solid	8015NM Prep	
890-5563-3	FS03	Total/NA	Solid	8015NM Prep	
890-5563-4	FS04	Total/NA	Solid	8015NM Prep	
890-5563-5	FS05	Total/NA	Solid	8015NM Prep	
890-5563-6	FS06	Total/NA	Solid	8015NM Prep	
890-5563-7	FS07	Total/NA	Solid	8015NM Prep	
890-5563-8	FS08	Total/NA	Solid	8015NM Prep	
890-5563-9	SW01	Total/NA	Solid	8015NM Prep	
890-5563-10	SW02	Total/NA	Solid	8015NM Prep	
890-5563-11	SW03	Total/NA	Solid	8015NM Prep	
890-5563-12	SW04	Total/NA	Solid	8015NM Prep	
890-5563-13	FS09	Total/NA	Solid	8015NM Prep	
890-5563-14	FS10	Total/NA	Solid	8015NM Prep	
890-5563-15	FS11	Total/NA	Solid	8015NM Prep	
890-5563-16	FS12	Total/NA	Solid	8015NM Prep	
890-5563-17	FS13	Total/NA	Solid	8015NM Prep	
890-5563-18	FS14	Total/NA	Solid	8015NM Prep	
MB 880-66313/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66313/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66313/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5566-A-8-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5566-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 66315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-19	FS15	Total/NA	Solid	8015NM Prep	
890-5563-20	FS16	Total/NA	Solid	8015NM Prep	
890-5563-21	FS17	Total/NA	Solid	8015NM Prep	
890-5563-22	FS18	Total/NA	Solid	8015NM Prep	
890-5563-23	FS19	Total/NA	Solid	8015NM Prep	
890-5563-24	SW05	Total/NA	Solid	8015NM Prep	
MB 880-66315/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66315/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66315/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5563-19 MS	FS15	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC Semi VOA (Continued)

Prep Batch: 66315 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-19 MSD	FS15	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	8015B NM	66313
890-5563-2	FS02	Total/NA	Solid	8015B NM	66313
890-5563-3	FS03	Total/NA	Solid	8015B NM	66313
890-5563-4	FS04	Total/NA	Solid	8015B NM	66313
890-5563-5	FS05	Total/NA	Solid	8015B NM	66313
890-5563-6	FS06	Total/NA	Solid	8015B NM	66313
890-5563-7	FS07	Total/NA	Solid	8015B NM	66313
890-5563-8	FS08	Total/NA	Solid	8015B NM	66313
890-5563-9	SW01	Total/NA	Solid	8015B NM	66313
890-5563-10	SW02	Total/NA	Solid	8015B NM	66313
890-5563-11	SW03	Total/NA	Solid	8015B NM	66313
890-5563-12	SW04	Total/NA	Solid	8015B NM	66313
890-5563-13	FS09	Total/NA	Solid	8015B NM	66313
890-5563-14	FS10	Total/NA	Solid	8015B NM	66313
890-5563-15	FS11	Total/NA	Solid	8015B NM	66313
890-5563-16	FS12	Total/NA	Solid	8015B NM	66313
890-5563-17	FS13	Total/NA	Solid	8015B NM	66313
890-5563-18	FS14	Total/NA	Solid	8015B NM	66313
MB 880-66313/1-A	Method Blank	Total/NA	Solid	8015B NM	66313
LCS 880-66313/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66313
LCSD 880-66313/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66313
890-5566-A-8-C MS	Matrix Spike	Total/NA	Solid	8015B NM	66313
890-5566-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66313

Analysis Batch: 66346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-19	FS15	Total/NA	Solid	8015B NM	66315
890-5563-20	FS16	Total/NA	Solid	8015B NM	66315
890-5563-21	FS17	Total/NA	Solid	8015B NM	66315
890-5563-22	FS18	Total/NA	Solid	8015B NM	66315
890-5563-23	FS19	Total/NA	Solid	8015B NM	66315
890-5563-24	SW05	Total/NA	Solid	8015B NM	66315
MB 880-66315/1-A	Method Blank	Total/NA	Solid	8015B NM	66315
LCS 880-66315/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66315
LCSD 880-66315/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66315
890-5563-19 MS	FS15	Total/NA	Solid	8015B NM	66315
890-5563-19 MSD	FS15	Total/NA	Solid	8015B NM	66315

Analysis Batch: 66516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Total/NA	Solid	8015 NM	
890-5563-2	FS02	Total/NA	Solid	8015 NM	
890-5563-3	FS03	Total/NA	Solid	8015 NM	
890-5563-4	FS04	Total/NA	Solid	8015 NM	
890-5563-5	FS05	Total/NA	Solid	8015 NM	
890-5563-6	FS06	Total/NA	Solid	8015 NM	
890-5563-7	FS07	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

GC Semi VOA (Continued)

Analysis Batch: 66516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-8	FS08	Total/NA	Solid	8015 NM	
890-5563-9	SW01	Total/NA	Solid	8015 NM	
890-5563-10	SW02	Total/NA	Solid	8015 NM	
890-5563-11	SW03	Total/NA	Solid	8015 NM	
890-5563-12	SW04	Total/NA	Solid	8015 NM	
890-5563-13	FS09	Total/NA	Solid	8015 NM	
890-5563-14	FS10	Total/NA	Solid	8015 NM	
890-5563-15	FS11	Total/NA	Solid	8015 NM	
890-5563-16	FS12	Total/NA	Solid	8015 NM	
890-5563-17	FS13	Total/NA	Solid	8015 NM	
890-5563-18	FS14	Total/NA	Solid	8015 NM	
890-5563-19	FS15	Total/NA	Solid	8015 NM	
890-5563-20	FS16	Total/NA	Solid	8015 NM	
890-5563-21	FS17	Total/NA	Solid	8015 NM	
890-5563-22	FS18	Total/NA	Solid	8015 NM	
890-5563-23	FS19	Total/NA	Solid	8015 NM	
890-5563-24	SW05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21	FS17	Soluble	Solid	DI Leach	
890-5563-22	FS18	Soluble	Solid	DI Leach	
890-5563-23	FS19	Soluble	Solid	DI Leach	
890-5563-24	SW05	Soluble	Solid	DI Leach	
MB 880-66356/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66356/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66356/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5563-21 MS	FS17	Soluble	Solid	DI Leach	
890-5563-21 MSD	FS17	Soluble	Solid	DI Leach	

Leach Batch: 66491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Soluble	Solid	DI Leach	
890-5563-2	FS02	Soluble	Solid	DI Leach	
890-5563-3	FS03	Soluble	Solid	DI Leach	
890-5563-4	FS04	Soluble	Solid	DI Leach	
890-5563-5	FS05	Soluble	Solid	DI Leach	
890-5563-6	FS06	Soluble	Solid	DI Leach	
890-5563-7	FS07	Soluble	Solid	DI Leach	
890-5563-8	FS08	Soluble	Solid	DI Leach	
890-5563-9	SW01	Soluble	Solid	DI Leach	
890-5563-10	SW02	Soluble	Solid	DI Leach	
890-5563-11	SW03	Soluble	Solid	DI Leach	
890-5563-12	SW04	Soluble	Solid	DI Leach	
890-5563-13	FS09	Soluble	Solid	DI Leach	
890-5563-14	FS10	Soluble	Solid	DI Leach	
890-5563-15	FS11	Soluble	Solid	DI Leach	
890-5563-16	FS12	Soluble	Solid	DI Leach	
890-5563-17	FS13	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

HPLC/IC (Continued)

Leach Batch: 66491 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-18	FS14	Soluble	Solid	DI Leach	
890-5563-19	FS15	Soluble	Solid	DI Leach	
890-5563-20	FS16	Soluble	Solid	DI Leach	
MB 880-66491/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66491/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66491/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5563-1 MS	FS01	Soluble	Solid	DI Leach	
890-5563-1 MSD	FS01	Soluble	Solid	DI Leach	
890-5563-11 MS	SW03	Soluble	Solid	DI Leach	
890-5563-11 MSD	SW03	Soluble	Solid	DI Leach	

Analysis Batch: 66492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-1	FS01	Soluble	Solid	300.0	66491
890-5563-2	FS02	Soluble	Solid	300.0	66491
890-5563-3	FS03	Soluble	Solid	300.0	66491
890-5563-4	FS04	Soluble	Solid	300.0	66491
890-5563-5	FS05	Soluble	Solid	300.0	66491
890-5563-6	FS06	Soluble	Solid	300.0	66491
890-5563-7	FS07	Soluble	Solid	300.0	66491
890-5563-8	FS08	Soluble	Solid	300.0	66491
890-5563-9	SW01	Soluble	Solid	300.0	66491
890-5563-10	SW02	Soluble	Solid	300.0	66491
890-5563-11	SW03	Soluble	Solid	300.0	66491
890-5563-12	SW04	Soluble	Solid	300.0	66491
890-5563-13	FS09	Soluble	Solid	300.0	66491
890-5563-14	FS10	Soluble	Solid	300.0	66491
890-5563-15	FS11	Soluble	Solid	300.0	66491
890-5563-16	FS12	Soluble	Solid	300.0	66491
890-5563-17	FS13	Soluble	Solid	300.0	66491
890-5563-18	FS14	Soluble	Solid	300.0	66491
890-5563-19	FS15	Soluble	Solid	300.0	66491
890-5563-20	FS16	Soluble	Solid	300.0	66491
MB 880-66491/1-A	Method Blank	Soluble	Solid	300.0	66491
LCS 880-66491/2-A	Lab Control Sample	Soluble	Solid	300.0	66491
LCSD 880-66491/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66491
890-5563-1 MS	FS01	Soluble	Solid	300.0	66491
890-5563-1 MSD	FS01	Soluble	Solid	300.0	66491
890-5563-11 MS	SW03	Soluble	Solid	300.0	66491
890-5563-11 MSD	SW03	Soluble	Solid	300.0	66491

Analysis Batch: 66512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21	FS17	Soluble	Solid	300.0	66356
890-5563-22	FS18	Soluble	Solid	300.0	66356
890-5563-23	FS19	Soluble	Solid	300.0	66356
890-5563-24	SW05	Soluble	Solid	300.0	66356
MB 880-66356/1-A	Method Blank	Soluble	Solid	300.0	66356
LCS 880-66356/2-A	Lab Control Sample	Soluble	Solid	300.0	66356
LCSD 880-66356/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66356
890-5563-21 MS	FS17	Soluble	Solid	300.0	66356

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

HPLC/IC (Continued)

Analysis Batch: 66512 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5563-21 MSD	FS17	Soluble	Solid	300.0	66356

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

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS01

Lab Sample ID: 890-5563-1

Date Collected: 11/01/23 09:20

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 13:27	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:15	CH	EET MID

Client Sample ID: FS02

Lab Sample ID: 890-5563-2

Date Collected: 11/01/23 09:25

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 13:49	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:30	CH	EET MID

Client Sample ID: FS03

Lab Sample ID: 890-5563-3

Date Collected: 11/01/23 09:30

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 14:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 14:11	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:36	CH	EET MID

Client Sample ID: FS04

Lab Sample ID: 890-5563-4

Date Collected: 11/01/23 09:35

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 23:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 23:05	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS04

Lab Sample ID: 890-5563-4

Date Collected: 11/01/23 09:35

Matrix: Solid

Date Received: 11/03/23 08:35

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			66516	11/07/23 14:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 14:32	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:41	CH	EET MID

Client Sample ID: FS05

Lab Sample ID: 890-5563-5

Date Collected: 11/01/23 09:40

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 23:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 23:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 14:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 14:55	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:46	CH	EET MID

Client Sample ID: FS06

Lab Sample ID: 890-5563-6

Date Collected: 11/01/23 09:45

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 23:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 23:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 15:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 15:17	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:02	CH	EET MID

Client Sample ID: FS07

Lab Sample ID: 890-5563-7

Date Collected: 11/01/23 09:50

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 00:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 00:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 15:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 15:38	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS07

Lab Sample ID: 890-5563-7

Date Collected: 11/01/23 09:50

Matrix: Solid

Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:07	CH	EET MID

Client Sample ID: FS08

Lab Sample ID: 890-5563-8

Date Collected: 11/01/23 09:55

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 00:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 00:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 16:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 16:00	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:12	CH	EET MID

Client Sample ID: SW01

Lab Sample ID: 890-5563-9

Date Collected: 11/01/23 10:20

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 00:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 00:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 16:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 16:45	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:17	CH	EET MID

Client Sample ID: SW02

Lab Sample ID: 890-5563-10

Date Collected: 11/01/23 10:30

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 01:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 01:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:08	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:22	CH	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW03

Lab Sample ID: 890-5563-11

Date Collected: 11/01/23 10:40

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 02:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 02:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:30	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:28	CH	EET MID

Client Sample ID: SW04

Lab Sample ID: 890-5563-12

Date Collected: 11/01/23 10:50

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 02:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 02:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:53	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:53	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:43	CH	EET MID

Client Sample ID: FS09

Lab Sample ID: 890-5563-13

Date Collected: 11/02/23 11:30

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 03:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 03:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 18:14	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 18:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:48	CH	EET MID

Client Sample ID: FS10

Lab Sample ID: 890-5563-14

Date Collected: 11/02/23 11:35

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 03:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 03:31	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS10

Lab Sample ID: 890-5563-14

Date Collected: 11/02/23 11:35

Matrix: Solid

Date Received: 11/03/23 08:35

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			66516	11/07/23 18:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 18:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:04	CH	EET MID

Client Sample ID: FS11

Lab Sample ID: 890-5563-15

Date Collected: 11/02/23 11:40

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 03:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 03:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 18:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 18:57	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:09	CH	EET MID

Client Sample ID: FS12

Lab Sample ID: 890-5563-16

Date Collected: 11/02/23 12:25

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 04:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 04:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 19:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 19:19	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:14	CH	EET MID

Client Sample ID: FS13

Lab Sample ID: 890-5563-17

Date Collected: 11/02/23 12:30

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 04:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 04:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 19:40	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 19:40	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS13

Lab Sample ID: 890-5563-17

Date Collected: 11/02/23 12:30

Matrix: Solid

Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:20	CH	EET MID

Client Sample ID: FS14

Lab Sample ID: 890-5563-18

Date Collected: 11/02/23 12:35

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 04:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 04:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 20:02	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 20:02	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:25	CH	EET MID

Client Sample ID: FS15

Lab Sample ID: 890-5563-19

Date Collected: 11/02/23 12:40

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 05:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 05:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 11:59	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:30	CH	EET MID

Client Sample ID: FS16

Lab Sample ID: 890-5563-20

Date Collected: 11/02/23 12:45

Matrix: Solid

Date Received: 11/03/23 08:35

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	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 05:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 05:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 13:05	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 01:35	CH	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: FS17

Lab Sample ID: 890-5563-21

Date Collected: 11/02/23 12:50

Matrix: Solid

Date Received: 11/03/23 08:35

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	66435	11/08/23 12:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 02:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 02:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 13:27	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:22	CH	EET MID

Client Sample ID: FS18

Lab Sample ID: 890-5563-22

Date Collected: 11/02/23 12:55

Matrix: Solid

Date Received: 11/03/23 08:35

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	66435	11/08/23 12:02	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 02:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 02:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 13:49	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:38	CH	EET MID

Client Sample ID: FS19

Lab Sample ID: 890-5563-23

Date Collected: 11/02/23 13:00

Matrix: Solid

Date Received: 11/03/23 08:35

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	66435	11/08/23 12:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 03:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 03:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 14:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 14:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:43	CH	EET MID

Client Sample ID: SW05

Lab Sample ID: 890-5563-24

Date Collected: 11/02/23 14:00

Matrix: Solid

Date Received: 11/03/23 08:35

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	66435	11/08/23 12:02	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 03:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 03:30	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Client Sample ID: SW05

Lab Sample ID: 890-5563-24

Date Collected: 11/02/23 14:00

Matrix: Solid

Date Received: 11/03/23 08:35

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			66516	11/07/23 14:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 14:32	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:48	CH	EET MID

Laboratory References:

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

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

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

Method Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5563-1

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: Hat Mesa 32-2

Job ID: 890-5563-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5563-1	FS01	Solid	11/01/23 09:20	11/03/23 08:35	4
890-5563-2	FS02	Solid	11/01/23 09:25	11/03/23 08:35	4
890-5563-3	FS03	Solid	11/01/23 09:30	11/03/23 08:35	4
890-5563-4	FS04	Solid	11/01/23 09:35	11/03/23 08:35	4
890-5563-5	FS05	Solid	11/01/23 09:40	11/03/23 08:35	4
890-5563-6	FS06	Solid	11/01/23 09:45	11/03/23 08:35	4
890-5563-7	FS07	Solid	11/01/23 09:50	11/03/23 08:35	4
890-5563-8	FS08	Solid	11/01/23 09:55	11/03/23 08:35	4
890-5563-9	SW01	Solid	11/01/23 10:20	11/03/23 08:35	0-4
890-5563-10	SW02	Solid	11/01/23 10:30	11/03/23 08:35	0-4
890-5563-11	SW03	Solid	11/01/23 10:40	11/03/23 08:35	0-4
890-5563-12	SW04	Solid	11/01/23 10:50	11/03/23 08:35	0-4
890-5563-13	FS09	Solid	11/02/23 11:30	11/03/23 08:35	4
890-5563-14	FS10	Solid	11/02/23 11:35	11/03/23 08:35	4
890-5563-15	FS11	Solid	11/02/23 11:40	11/03/23 08:35	4
890-5563-16	FS12	Solid	11/02/23 12:25	11/03/23 08:35	3
890-5563-17	FS13	Solid	11/02/23 12:30	11/03/23 08:35	3
890-5563-18	FS14	Solid	11/02/23 12:35	11/03/23 08:35	3
890-5563-19	FS15	Solid	11/02/23 12:40	11/03/23 08:35	3
890-5563-20	FS16	Solid	11/02/23 12:45	11/03/23 08:35	3
890-5563-21	FS17	Solid	11/02/23 12:50	11/03/23 08:35	3
890-5563-22	FS18	Solid	11/02/23 12:55	11/03/23 08:35	3
890-5563-23	FS19	Solid	11/02/23 13:00	11/03/23 08:35	3
890-5563-24	SW05	Solid	11/02/23 14:00	11/03/23 08:35	0-3

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Chain of Custody

Houston, TX (281) 240-2200 Dallas, TX (214) 902-0900
 Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199



Work Order No: _____

www.xenco.com Page 1 of 3

Project Manager: Ben Bellil	Bill to: (if different) Garrett Green
Company Name: Ensolum	Company Name: XTO Energy
Address: 3122 National Parks Hwy	Address: 3104 E. Green St.
City, State ZIP: Carlsbad, NM 88220	City, State ZIP: Carlsbad, NM 88220
Phone: 303-887-2946	Email: Garrett.Green@ExxonMobil.com

Project Name: Hat Mesa 32-2	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number: 03C1558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		 890-5563 Chain of Custody	None: NO DI Water: H ₂ O
Project Location: Connor Whitman	Due Date: TAT starts the day received by the lab, if received by 4:30pm			Cool: Cool MeOH: Me
Sampler's Name: Connor Whitman	Temp Blank: Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	Wet Ice: Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>		HCL: HC HNO ₃ : HN
PO #:	Thermometer ID: TMO07	Correction Factor: -0.2		H ₂ SO ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT	Temperature Reading: 1.4	Corrected Temperature: 1.2		H ₃ PO ₄ : HP
Samples Received Intact: Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	Temp Blank: Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	Thermometer ID: TMO07		NH ₄ SO ₄ : NABIS
Cooler Custody Seals: Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	Temperature Reading: 1.4	Corrected Temperature: 1.2		Na ₂ S ₂ O ₃ : NaSO ₃
Sample Custody Seals: Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>				Zn Acetate+NaOH: Zn
Total Containers:				NaOH+Ascorbic Acid: S-APC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Sample Comments
FS01	S	11/1/23	920	4	C	1	CHLORIDES (EPA: 3000.0)	Incident ID: nAPP2316046257
FS02			925			1	TPH (8015)	Cost Center: 1148831001
FS03			930			1	BTEX (8021)	AFE:
FS04			935			1		
FS05			940			1		
FS06			945			1		
FS07			950			1		
FS08			955			1		
SW01			1020	0-4		1		
SW02			1030	0-4		1		

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$95.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>ctt</i>	<i>caribe</i>	15:28 11/1/23			
3					
5					

Revised Date: 06/25/2020 Rev. 2020.2



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: Ben Bellill	Bill to: (if different) Garrett Green
Company Name: Ensolum	Company Name: XTO Energy
Address: 3122 National Parks Hwy	Address: 3104 E. Green St.
City, State ZIP: Carlsbad, NM 88220	City, State ZIP: Carlsbad, NM 88220
Phone: 303-887-2946	Email: Garrett.Green@ExxonMobil.com

Project Name: Hat Mesa 32-2	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number: 03C1558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			None: NO DI Water: H ₂ O
Project Location: Connor Whitman	Due Date: _____			Cool: Cool MeOH: Me
Sampler's Name: Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm			HCL: HC HNO ₃ : HN
PO #: _____				H ₂ SO ₄ : H ₂ NaOH: Na

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters		Sample Comments
							Temp Blank:	Wet Ice:	
SW03	S	11/1/23	1040	0-4	C	1			Incident ID: nAPP2316046257
SW04		↓	1050	0-4	C	1			
F509		11/2/23	1130	4	↓	1			
F510		↓	1135	4	↓	1			
F511		↓	1140	4	↓	1			
F512		↓	1235	3	↓	1			Cost Center: 1148831001
F513		↓	1230	↓	↓	1			AFE:
F514		↓	1235	↓	↓	1			
F515		↓	1240	↓	↓	1			
F516		↓	1245	↓	↓	1			

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$95.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Garrett</i>	<i>colwell</i>	15:20 11/2			
3					
5					

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5563-1

SDG Number:

Login Number: 5563

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	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5563-1

SDG Number:

Login Number: 5563

List Source: Eurofins Midland

List Number: 2

List Creation: 11/06/23 01:01 PM

Creator: Rodriguez, Leticia

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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum

601 N. Marienfeld St.
Suite 400

Midland, Texas 79701

Generated 11/13/2023 1:58:22 PM

JOB DESCRIPTION

Hat Mesa 32-2
SDG NUMBER 32.53601,-103,688

JOB NUMBER

890-5567-1

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



Generated
11/13/2023 1:58:22 PM

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



Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-5567-1
SDG: 32.53601,-103,688

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Job ID: 890-5567-1

Laboratory: Eurofins Carlsbad

Narrative**Job Narrative
890-5567-1**

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/3/2023 2:50 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 3.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS20 (890-5567-1), FS21 (890-5567-2), FS22 (890-5567-3), FS23 (890-5567-4), FS24 (890-5567-5), FS25 (890-5567-6), FS26 (890-5567-7), FS27 (890-5567-8), FS28 (890-5567-9), FS29 (890-5567-10), FS30 (890-5567-11), FS31 (890-5567-12), FS32 (890-5567-13), FS33 (890-5567-14), FS34 (890-5567-15), FS35 (890-5567-16), FS36 (890-5567-17), SW06 (890-5567-18), SW07 (890-5567-19), SW08 (890-5567-20), SW09 (890-5567-21), SW10 (890-5567-22), FS37 (890-5567-23) and FS38 (890-5567-24).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-66374 and 880-66532 and analytical batch 880-66684 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW08 (890-5567-20). 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.

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66452 and analytical batch 880-66469 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-66469/20), (CCV 880-66469/31) and (CCV 880-66469/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66453 and analytical batch 880-66473 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS22 (890-5567-3), FS23 (890-5567-4), FS24 (890-5567-5), FS25 (890-5567-6), FS26 (890-5567-7), FS27 (890-5567-8), FS28 (890-5567-9), FS29 (890-5567-10), FS30 (890-5567-11), FS31 (890-5567-12), FS32 (890-5567-13), FS33 (890-5567-14), FS34 (890-5567-15), FS35 (890-5567-16), FS36 (890-5567-17), SW06 (890-5567-18), SW07 (890-5567-19), SW08 (890-5567-20), SW09 (890-5567-21), SW10 (890-5567-22), (890-5567-A-3-D MS) and (890-5567-A-3-E MSD). 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: (CCV 880-66473/33), (CCV 880-66473/34) and (CCV 880-66473/5). Evidence of matrix interferences is not obvious.

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Job ID: 890-5567-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-66454 and analytical batch 880-66475 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS37 (890-5567-23), FS38 (890-5567-24), (890-5567-A-23-D MS) and (890-5567-A-23-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-66475/5). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-66337 and analytical batch 880-66518 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Client Sample Results

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

Client Sample ID: FS20

Lab Sample ID: 890-5567-1

Date Collected: 11/03/23 08:45

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 22:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 22:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 22:18	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/10/23 22:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 22:18	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/10/23 22:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	11/07/23 15:52	11/10/23 22:18	1
1,4-Difluorobenzene (Surr)	101		70 - 130	11/07/23 15:52	11/10/23 22:18	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/10/23 22:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/08/23 19:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/07/23 17:40	11/08/23 19:15	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/07/23 17:40	11/08/23 19:15	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/07/23 17:40	11/08/23 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/07/23 17:40	11/08/23 19:15	1
o-Terphenyl	105		70 - 130	11/07/23 17:40	11/08/23 19:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	412		4.98	mg/Kg			11/08/23 19:33	1

Client Sample ID: FS21

Lab Sample ID: 890-5567-2

Date Collected: 11/03/23 08:50

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 22:39	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:39	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:39	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/10/23 22:39	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:39	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/10/23 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/07/23 15:52	11/10/23 22:39	1
1,4-Difluorobenzene (Surr)	77		70 - 130	11/07/23 15:52	11/10/23 22:39	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS21

Lab Sample ID: 890-5567-2

Date Collected: 11/03/23 08:50

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/10/23 22:39	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			11/08/23 19:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/07/23 17:40	11/08/23 19:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/07/23 17:40	11/08/23 19:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/07/23 17:40	11/08/23 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/07/23 17:40	11/08/23 19:36	1
o-Terphenyl	104		70 - 130	11/07/23 17:40	11/08/23 19:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.1		5.05	mg/Kg			11/08/23 19:38	1

Client Sample ID: FS22

Lab Sample ID: 890-5567-3

Date Collected: 11/03/23 08:55

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 22:59	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:59	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/10/23 22:59	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/10/23 22:59	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/10/23 22:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	11/07/23 15:52	11/10/23 22:59	1
1,4-Difluorobenzene (Surr)	95		70 - 130	11/07/23 15:52	11/10/23 22:59	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/10/23 22:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/08/23 11:04	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	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 11:04	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 11:04	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS22

Lab Sample ID: 890-5567-3

Date Collected: 11/03/23 08:55

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 11:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	149	S1+	70 - 130			11/07/23 17:44	11/08/23 11:04	1
o-Terphenyl	131	S1+	70 - 130			11/07/23 17:44	11/08/23 11:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.2		5.04	mg/Kg			11/08/23 19:44	1

Client Sample ID: FS23

Lab Sample ID: 890-5567-4

Date Collected: 11/03/23 09:00

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 23:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/10/23 23:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			11/07/23 15:52	11/10/23 23:20	1
1,4-Difluorobenzene (Surr)	84		70 - 130			11/07/23 15:52	11/10/23 23:20	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/10/23 23:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/08/23 12:11	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	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 12:11	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 12:11	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 12:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	181	S1+	70 - 130			11/07/23 17:44	11/08/23 12:11	1
o-Terphenyl	155	S1+	70 - 130			11/07/23 17:44	11/08/23 12:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.2		5.02	mg/Kg			11/08/23 19:49	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS24

Lab Sample ID: 890-5567-5

Date Collected: 11/03/23 09:25

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/10/23 23:40	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/10/23 23:40	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/10/23 23:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/10/23 23:40	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/10/23 23:40	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/10/23 23:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	11/07/23 15:52	11/10/23 23:40	1
1,4-Difluorobenzene (Surr)	90		70 - 130	11/07/23 15:52	11/10/23 23:40	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			11/10/23 23:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/08/23 12:34	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	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 12:34	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 12:34	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	141	S1+	70 - 130	11/07/23 17:44	11/08/23 12:34	1
o-Terphenyl	125		70 - 130	11/07/23 17:44	11/08/23 12:34	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	439		5.01	mg/Kg			11/08/23 19:55	1

Client Sample ID: FS25

Lab Sample ID: 890-5567-6

Date Collected: 11/03/23 09:30

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 00:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:01	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 00:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:01	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	11/07/23 15:52	11/11/23 00:01	1
1,4-Difluorobenzene (Surr)	70		70 - 130	11/07/23 15:52	11/11/23 00:01	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS25

Lab Sample ID: 890-5567-6

Date Collected: 11/03/23 09:30

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/11/23 00:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			11/08/23 12:56	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	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 12:56	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 12:56	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 12:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	156	S1+	70 - 130	11/07/23 17:44	11/08/23 12:56	1
o-Terphenyl	137	S1+	70 - 130	11/07/23 17:44	11/08/23 12:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.1		5.01	mg/Kg			11/08/23 20:12	1

Client Sample ID: FS26

Lab Sample ID: 890-5567-7

Date Collected: 11/03/23 09:15

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 00:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 00:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 00:22	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 00:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/07/23 15:52	11/11/23 00:22	1
1,4-Difluorobenzene (Surr)	83		70 - 130	11/07/23 15:52	11/11/23 00:22	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/11/23 00:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/08/23 13:18	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	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 13:18	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 13:18	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS26

Lab Sample ID: 890-5567-7

Date Collected: 11/03/23 09:15

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 13:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	146	S1+	70 - 130			11/07/23 17:44	11/08/23 13:18	1
o-Terphenyl	129		70 - 130			11/07/23 17:44	11/08/23 13:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		5.04	mg/Kg			11/08/23 20:18	1

Client Sample ID: FS27

Lab Sample ID: 890-5567-8

Date Collected: 11/03/23 09:20

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 00:42	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/07/23 15:52	11/11/23 00:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			11/07/23 15:52	11/11/23 00:42	1
1,4-Difluorobenzene (Surr)	89		70 - 130			11/07/23 15:52	11/11/23 00:42	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/11/23 00:42	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			11/08/23 13:40	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		11/07/23 17:44	11/08/23 13:40	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		11/07/23 17:44	11/08/23 13:40	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		11/07/23 17:44	11/08/23 13:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	159	S1+	70 - 130			11/07/23 17:44	11/08/23 13:40	1
o-Terphenyl	138	S1+	70 - 130			11/07/23 17:44	11/08/23 13:40	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	138		5.05	mg/Kg			11/08/23 20:35	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS28

Lab Sample ID: 890-5567-9

Date Collected: 11/03/23 10:55

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 01:03	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 01:03	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 01:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 01:03	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 01:03	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 01:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	11/07/23 15:52	11/11/23 01:03	1
1,4-Difluorobenzene (Surr)	85		70 - 130	11/07/23 15:52	11/11/23 01:03	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/23 01:03	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			11/08/23 14:02	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		11/07/23 17:44	11/08/23 14:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 14:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 14:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	155	S1+	70 - 130	11/07/23 17:44	11/08/23 14:02	1
o-Terphenyl	139	S1+	70 - 130	11/07/23 17:44	11/08/23 14:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	133		4.99	mg/Kg			11/08/23 20:40	1

Client Sample ID: FS29

Lab Sample ID: 890-5567-10

Date Collected: 11/03/23 11:00

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 01:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 01:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 01:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 01:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 01:23	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 01:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	11/07/23 15:52	11/11/23 01:23	1
1,4-Difluorobenzene (Surr)	79		70 - 130	11/07/23 15:52	11/11/23 01:23	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS29

Lab Sample ID: 890-5567-10

Date Collected: 11/03/23 11:00

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/23 01:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			11/08/23 14:23	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	<50.2	U	50.2	mg/Kg		11/07/23 17:44	11/08/23 14:23	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		11/07/23 17:44	11/08/23 14:23	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		11/07/23 17:44	11/08/23 14:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	150	S1+	70 - 130	11/07/23 17:44	11/08/23 14:23	1
o-Terphenyl	132	S1+	70 - 130	11/07/23 17:44	11/08/23 14:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	259		4.98	mg/Kg			11/08/23 20:46	1

Client Sample ID: FS30

Lab Sample ID: 890-5567-11

Date Collected: 11/03/23 11:45

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 02:47	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 02:47	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 02:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/11/23 02:47	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 02:47	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/11/23 02:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	11/07/23 15:52	11/11/23 02:47	1
1,4-Difluorobenzene (Surr)	99		70 - 130	11/07/23 15:52	11/11/23 02:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/11/23 02:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/08/23 14:45	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	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 14:45	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 14:45	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS30

Lab Sample ID: 890-5567-11

Date Collected: 11/03/23 11:45

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 14:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130			11/07/23 17:44	11/08/23 14:45	1
o-Terphenyl	121		70 - 130			11/07/23 17:44	11/08/23 14:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	362		5.05	mg/Kg			11/08/23 13:14	1

Client Sample ID: FS31

Lab Sample ID: 890-5567-12

Date Collected: 11/03/23 11:10

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 03:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			11/07/23 15:52	11/11/23 03:07	1
1,4-Difluorobenzene (Surr)	79		70 - 130			11/07/23 15:52	11/11/23 03:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/11/23 03:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/08/23 15:06	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	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 15:06	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 15:06	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/07/23 17:44	11/08/23 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	158	S1+	70 - 130			11/07/23 17:44	11/08/23 15:06	1
o-Terphenyl	143	S1+	70 - 130			11/07/23 17:44	11/08/23 15:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.5		5.05	mg/Kg			11/08/23 13:20	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS32

Lab Sample ID: 890-5567-13

Date Collected: 11/03/23 11:15

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 03:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 03:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	11/07/23 15:52	11/11/23 03:28	1
1,4-Difluorobenzene (Surr)	98		70 - 130	11/07/23 15:52	11/11/23 03:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/23 03:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5	mg/Kg			11/08/23 15:51	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	<49.5	U	49.5	mg/Kg		11/07/23 17:44	11/08/23 15:51	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5	mg/Kg		11/07/23 17:44	11/08/23 15:51	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5	mg/Kg		11/07/23 17:44	11/08/23 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	167	S1+	70 - 130	11/07/23 17:44	11/08/23 15:51	1
o-Terphenyl	145	S1+	70 - 130	11/07/23 17:44	11/08/23 15:51	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.9		5.04	mg/Kg			11/08/23 13:25	1

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 03:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 03:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 03:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 03:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/07/23 15:52	11/11/23 03:49	1
1,4-Difluorobenzene (Surr)	80		70 - 130	11/07/23 15:52	11/11/23 03:49	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/23 03:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/08/23 16:13	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	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 16:13	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 16:13	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	153	S1+	70 - 130	11/07/23 17:44	11/08/23 16:13	1
o-Terphenyl	137	S1+	70 - 130	11/07/23 17:44	11/08/23 16:13	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.4		4.99	mg/Kg			11/08/23 13:31	1

Client Sample ID: FS34

Lab Sample ID: 890-5567-15

Date Collected: 11/03/23 11:50

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 04:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 04:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 04:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 04:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 04:09	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 04:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	11/07/23 15:52	11/11/23 04:09	1
1,4-Difluorobenzene (Surr)	85		70 - 130	11/07/23 15:52	11/11/23 04:09	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/23 04:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			11/08/23 16:35	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	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 16:35	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 16:35	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS34

Lab Sample ID: 890-5567-15

Date Collected: 11/03/23 11:50

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		11/07/23 17:44	11/08/23 16:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	156	S1+	70 - 130			11/07/23 17:44	11/08/23 16:35	1
o-Terphenyl	138	S1+	70 - 130			11/07/23 17:44	11/08/23 16:35	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	202		4.96	mg/Kg			11/08/23 13:48	1

Client Sample ID: FS35

Lab Sample ID: 890-5567-16

Date Collected: 11/03/23 11:30

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 04:30	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 04:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			11/07/23 15:52	11/11/23 04:30	1
1,4-Difluorobenzene (Surr)	85		70 - 130			11/07/23 15:52	11/11/23 04:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/23 04:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/08/23 16:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 16:58	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 16:58	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/07/23 17:44	11/08/23 16:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	176	S1+	70 - 130			11/07/23 17:44	11/08/23 16:58	1
o-Terphenyl	153	S1+	70 - 130			11/07/23 17:44	11/08/23 16:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	213		5.05	mg/Kg			11/08/23 15:36	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS36

Lab Sample ID: 890-5567-17

Date Collected: 11/03/23 12:35

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 04:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 04:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/07/23 15:52	11/11/23 04:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/07/23 15:52	11/11/23 04:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	11/07/23 15:52	11/11/23 04:50	1
1,4-Difluorobenzene (Surr)	78		70 - 130	11/07/23 15:52	11/11/23 04:50	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			11/11/23 04:50	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			11/08/23 17:20	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		11/07/23 17:44	11/08/23 17:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/07/23 17:44	11/08/23 17:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/07/23 17:44	11/08/23 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	168	S1+	70 - 130	11/07/23 17:44	11/08/23 17:20	1
o-Terphenyl	151	S1+	70 - 130	11/07/23 17:44	11/08/23 17:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	135		4.96	mg/Kg			11/08/23 15:42	1

Client Sample ID: SW06

Lab Sample ID: 890-5567-18

Date Collected: 11/03/23 10:10

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 05:11	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 05:11	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 05:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/07/23 15:52	11/11/23 05:11	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/07/23 15:52	11/11/23 05:11	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/07/23 15:52	11/11/23 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	11/07/23 15:52	11/11/23 05:11	1
1,4-Difluorobenzene (Surr)	78		70 - 130	11/07/23 15:52	11/11/23 05:11	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: SW06

Lab Sample ID: 890-5567-18

Date Collected: 11/03/23 10:10

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/11/23 05:11	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			11/08/23 17:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 17:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 17:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/07/23 17:44	11/08/23 17:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	188	S1+	70 - 130	11/07/23 17:44	11/08/23 17:42	1
o-Terphenyl	162	S1+	70 - 130	11/07/23 17:44	11/08/23 17:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80.2		4.96	mg/Kg			11/08/23 15:47	1

Client Sample ID: SW07

Lab Sample ID: 890-5567-19

Date Collected: 11/03/23 11:35

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 05:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 05:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 05:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 05:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/11/23 05:31	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/07/23 15:52	11/11/23 05:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	11/07/23 15:52	11/11/23 05:31	1
1,4-Difluorobenzene (Surr)	79		70 - 130	11/07/23 15:52	11/11/23 05:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/23 05:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/08/23 18:05	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	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 18:05	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 18:05	1

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Client Sample Results

Client: Ensolium
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103.688

Client Sample ID: SW07

Lab Sample ID: 890-5567-19

Date Collected: 11/03/23 11:35

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/07/23 17:44	11/08/23 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130			11/07/23 17:44	11/08/23 18:05	1
o-Terphenyl	128		70 - 130			11/07/23 17:44	11/08/23 18:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80.6		4.97	mg/Kg			11/08/23 15:53	1

Client Sample ID: SW08

Lab Sample ID: 890-5567-20

Date Collected: 11/03/23 13:00

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/07/23 15:52	11/11/23 05:52	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/07/23 15:52	11/11/23 05:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			11/07/23 15:52	11/11/23 05:52	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130			11/07/23 15:52	11/11/23 05:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/11/23 05:52	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			11/08/23 18:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 18:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 18:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 18:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	153	S1+	70 - 130			11/07/23 17:44	11/08/23 18:27	1
o-Terphenyl	136	S1+	70 - 130			11/07/23 17:44	11/08/23 18:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	102		5.03	mg/Kg			11/08/23 16:10	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: SW09

Lab Sample ID: 890-5567-21

Date Collected: 11/03/23 11:40

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/08/23 11:51	11/12/23 00:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/08/23 11:51	11/12/23 00:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/08/23 11:51	11/12/23 00:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/08/23 11:51	11/12/23 00:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/08/23 11:51	11/12/23 00:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/08/23 11:51	11/12/23 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	11/08/23 11:51	11/12/23 00:44	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/08/23 11:51	11/12/23 00:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/12/23 00:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/08/23 18:49	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	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 18:49	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 18:49	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	147	S1+	70 - 130	11/07/23 17:44	11/08/23 18:49	1
o-Terphenyl	133	S1+	70 - 130	11/07/23 17:44	11/08/23 18:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.5		4.96	mg/Kg			11/08/23 16:15	1

Client Sample ID: SW10

Lab Sample ID: 890-5567-22

Date Collected: 11/03/23 13:30

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/08/23 11:51	11/12/23 01:04	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:04	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:04	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		11/08/23 11:51	11/12/23 01:04	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:04	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		11/08/23 11:51	11/12/23 01:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	11/08/23 11:51	11/12/23 01:04	1
1,4-Difluorobenzene (Surr)	113		70 - 130	11/08/23 11:51	11/12/23 01:04	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: SW10

Lab Sample ID: 890-5567-22

Date Collected: 11/03/23 13:30

Matrix: Solid

Date Received: 11/03/23 14:50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			11/12/23 01:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			11/08/23 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	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 19:11	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 19:11	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		11/07/23 17:44	11/08/23 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	198	S1+	70 - 130	11/07/23 17:44	11/08/23 19:11	1
o-Terphenyl	177	S1+	70 - 130	11/07/23 17:44	11/08/23 19:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		5.00	mg/Kg			11/08/23 16:21	1

Client Sample ID: FS37

Lab Sample ID: 890-5567-23

Date Collected: 11/03/23 13:35

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/08/23 11:51	11/12/23 01:25	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:25	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/08/23 11:51	11/12/23 01:25	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/08/23 11:51	11/12/23 01:25	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/08/23 11:51	11/12/23 01:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	11/08/23 11:51	11/12/23 01:25	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/08/23 11:51	11/12/23 01:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/12/23 01:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5	mg/Kg			11/08/23 11:04	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	<49.5	U	49.5	mg/Kg		11/07/23 17:47	11/08/23 11:04	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5	mg/Kg		11/07/23 17:47	11/08/23 11:04	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103.688

Client Sample ID: FS37

Lab Sample ID: 890-5567-23

Date Collected: 11/03/23 13:35

Matrix: Solid

Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.5	U	49.5	mg/Kg		11/07/23 17:47	11/08/23 11:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130			11/07/23 17:47	11/08/23 11:04	1
o-Terphenyl	145	S1+	70 - 130			11/07/23 17:47	11/08/23 11:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.6		5.04	mg/Kg			11/08/23 16:27	1

Client Sample ID: FS38

Lab Sample ID: 890-5567-24

Date Collected: 11/03/23 14:00

Matrix: Solid

Date Received: 11/03/23 14:50

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		11/08/23 11:51	11/12/23 01:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			11/08/23 11:51	11/12/23 01:45	1
1,4-Difluorobenzene (Surr)	116		70 - 130			11/08/23 11:51	11/12/23 01:45	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/12/23 01:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/08/23 12:11	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	<50.5	U	50.5	mg/Kg		11/07/23 17:47	11/08/23 12:11	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/07/23 17:47	11/08/23 12:11	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/07/23 17:47	11/08/23 12:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	160	S1+	70 - 130			11/07/23 17:47	11/08/23 12:11	1
o-Terphenyl	174	S1+	70 - 130			11/07/23 17:47	11/08/23 12:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	371		5.02	mg/Kg			11/08/23 16:32	1

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Surrogate Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-5567-1	FS20	75	101
890-5567-1 MS	FS20	115	105
890-5567-1 MSD	FS20	117	98
890-5567-2	FS21	88	77
890-5567-3	FS22	82	95
890-5567-4	FS23	92	84
890-5567-5	FS24	90	90
890-5567-6	FS25	91	70
890-5567-7	FS26	88	83
890-5567-8	FS27	89	89
890-5567-9	FS28	90	85
890-5567-10	FS29	87	79
890-5567-11	FS30	77	99
890-5567-12	FS31	90	79
890-5567-13	FS32	79	98
890-5567-14	FS33	89	80
890-5567-15	FS34	96	85
890-5567-16	FS35	92	85
890-5567-17	FS36	94	78
890-5567-18	SW06	90	78
890-5567-19	SW07	97	79
890-5567-20	SW08	94	66 S1-
890-5567-21	SW09	83	105
890-5567-21 MS	SW09	99	108
890-5567-21 MSD	SW09	120	103
890-5567-22	SW10	99	113
890-5567-23	FS37	104	105
890-5567-24	FS38	108	116
LCS 880-66433/1-A	Lab Control Sample	119	113
LCS 880-66532/1-A	Lab Control Sample	103	103
LCS 880-66433/2-A	Lab Control Sample Dup	117	110
LCS 880-66532/2-A	Lab Control Sample Dup	113	100
MB 880-66374/5-A	Method Blank	112	148 S1+
MB 880-66433/5-A	Method Blank	72	103
MB 880-66532/5-A	Method Blank	109	142 S1+
MB 880-66611/5-A	Method Blank	72	96

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5567-1	FS20	99	105
890-5567-2	FS21	99	104
890-5567-3	FS22	149 S1+	131 S1+

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Surrogate Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5567-3 MS	FS22	151 S1+	124
890-5567-3 MSD	FS22	151 S1+	122
890-5567-4	FS23	181 S1+	155 S1+
890-5567-5	FS24	141 S1+	125
890-5567-6	FS25	156 S1+	137 S1+
890-5567-7	FS26	146 S1+	129
890-5567-8	FS27	159 S1+	138 S1+
890-5567-9	FS28	155 S1+	139 S1+
890-5567-10	FS29	150 S1+	132 S1+
890-5567-11	FS30	138 S1+	121
890-5567-12	FS31	158 S1+	143 S1+
890-5567-13	FS32	167 S1+	145 S1+
890-5567-14	FS33	153 S1+	137 S1+
890-5567-15	FS34	156 S1+	138 S1+
890-5567-16	FS35	176 S1+	153 S1+
890-5567-17	FS36	168 S1+	151 S1+
890-5567-18	SW06	188 S1+	162 S1+
890-5567-19	SW07	140 S1+	128
890-5567-20	SW08	153 S1+	136 S1+
890-5567-21	SW09	147 S1+	133 S1+
890-5567-22	SW10	198 S1+	177 S1+
890-5567-23	FS37	136 S1+	145 S1+
890-5567-23 MS	FS37	168 S1+	162 S1+
890-5567-23 MSD	FS37	145 S1+	140 S1+
890-5567-24	FS38	160 S1+	174 S1+
890-5568-A-12-F MS	Matrix Spike	105	105
890-5568-A-12-G MSD	Matrix Spike Duplicate	109	106
LCS 880-66452/2-A	Lab Control Sample	88	109
LCS 880-66453/2-A	Lab Control Sample	96	100
LCS 880-66454/2-A	Lab Control Sample	80	91
LCSD 880-66452/3-A	Lab Control Sample Dup	91	99
LCSD 880-66453/3-A	Lab Control Sample Dup	93	95
LCSD 880-66454/3-A	Lab Control Sample Dup	78	88
MB 880-66452/1-A	Method Blank	166 S1+	179 S1+
MB 880-66453/1-A	Method Blank	233 S1+	214 S1+
MB 880-66454/1-A	Method Blank	202 S1+	227 S1+

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66374/5-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66374

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/23 13:38	11/11/23 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/07/23 13:38	11/11/23 12:36	1
1,4-Difluorobenzene (Surr)	148	S1+	70 - 130	11/07/23 13:38	11/11/23 12:36	1

Lab Sample ID: MB 880-66433/5-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66433

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/23 15:52	11/10/23 21:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	11/07/23 15:52	11/10/23 21:57	1
1,4-Difluorobenzene (Surr)	103		70 - 130	11/07/23 15:52	11/10/23 21:57	1

Lab Sample ID: LCS 880-66433/1-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1044		mg/Kg		104	70 - 130
Toluene	0.100	0.09487		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.1009		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2140		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1033		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: LCSD 880-66433/2-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1053		mg/Kg		105	70 - 130	1	35

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: LCSD 880-66433/2-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits	RPD		
Toluene	0.100	0.09748		mg/Kg		97	70 - 130	3	35	
Ethylbenzene	0.100	0.09733		mg/Kg		97	70 - 130	4	35	
m-Xylene & p-Xylene	0.200	0.2122		mg/Kg		106	70 - 130	1	35	
o-Xylene	0.100	0.1023		mg/Kg		102	70 - 130	1	35	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	117		70 - 130							
1,4-Difluorobenzene (Surr)	110		70 - 130							

Lab Sample ID: 890-5567-1 MS
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: FS20
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec	
									Limits	RPD
Benzene	<0.00200	U	0.0996	0.09390		mg/Kg		94	70 - 130	
Toluene	<0.00200	U	0.0996	0.09617		mg/Kg		97	70 - 130	
Ethylbenzene	<0.00200	U	0.0996	0.09277		mg/Kg		93	70 - 130	
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1964		mg/Kg		99	70 - 130	
o-Xylene	<0.00200	U	0.0996	0.09317		mg/Kg		94	70 - 130	
		MS	MS							
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	115		70 - 130							
1,4-Difluorobenzene (Surr)	105		70 - 130							

Lab Sample ID: 890-5567-1 MSD
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: FS20
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD
									Limits	RPD	
Benzene	<0.00200	U	0.0990	0.09887		mg/Kg		100	70 - 130	5	35
Toluene	<0.00200	U	0.0990	0.09974		mg/Kg		101	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.0990	0.09483		mg/Kg		96	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.2009		mg/Kg		101	70 - 130	2	35
o-Xylene	<0.00200	U	0.0990	0.09599		mg/Kg		97	70 - 130	3	35
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	117		70 - 130								
1,4-Difluorobenzene (Surr)	98		70 - 130								

Lab Sample ID: MB 880-66532/5-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66532

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 00:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 00:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/08/23 11:51	11/12/23 00:15	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: MB 880-66532/5-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66532

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/23 11:51	11/12/23 00:15	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/08/23 11:51	11/12/23 00:15	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	109		70 - 130	11/08/23 11:51	11/12/23 00:15	1
1,4-Difluorobenzene (Surr)	142	S1+	70 - 130	11/08/23 11:51	11/12/23 00:15	1

Lab Sample ID: LCS 880-66532/1-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	0.100	0.09843		mg/Kg		98	70 - 130
Toluene	0.100	0.08510		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.07552		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	0.200	0.1826		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09127		mg/Kg		91	70 - 130

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

Lab Sample ID: LCSD 880-66532/2-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
Benzene	0.100	0.1026		mg/Kg		103	70 - 130	4	35
Toluene	0.100	0.08948		mg/Kg		89	70 - 130	5	35
Ethylbenzene	0.100	0.08132		mg/Kg		81	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1874		mg/Kg		94	70 - 130	3	35
o-Xylene	0.100	0.1014		mg/Kg		101	70 - 130	10	35

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

Lab Sample ID: 890-5567-21 MS
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: SW09
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Benzene	<0.00199	U	0.0996	0.1151		mg/Kg		116	70 - 130
Toluene	<0.00199	U	0.0996	0.09259		mg/Kg		93	70 - 130
Ethylbenzene	<0.00199	U	0.0996	0.08722		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1956		mg/Kg		98	70 - 130
o-Xylene	<0.00199	U	0.0996	0.09311		mg/Kg		93	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5567-21 MS
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: SW09
Prep Type: Total/NA
Prep Batch: 66532

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-5567-21 MSD
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: SW09
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.1044		mg/Kg		105	70 - 130	10	35
Toluene	<0.00199	U	0.0990	0.08792		mg/Kg		89	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.0990	0.08667		mg/Kg		88	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.2054		mg/Kg		104	70 - 130	5	35
o-Xylene	<0.00199	U	0.0990	0.09873		mg/Kg		100	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-66611/5-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66611

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/09/23 11:14	11/10/23 11:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	11/09/23 11:14	11/10/23 11:00	1
1,4-Difluorobenzene (Surr)	96		70 - 130	11/09/23 11:14	11/10/23 11:00	1

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

Lab Sample ID: MB 880-66452/1-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66452

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		11/07/23 17:39	11/08/23 07:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/23 17:39	11/08/23 07:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/23 17:39	11/08/23 07:47	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: MB 880-66452/1-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66452

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	166	S1+	70 - 130	11/07/23 17:39	11/08/23 07:47	1
o-Terphenyl	179	S1+	70 - 130	11/07/23 17:39	11/08/23 07:47	1

Lab Sample ID: LCS 880-66452/2-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66452

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	862.5		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	908.3		mg/Kg		91	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	88		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-66452/3-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66452

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	963.0		mg/Kg		96	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	918.2		mg/Kg		92	70 - 130	1	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	91		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-5568-A-12-F MS
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66452

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	993	771.3		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	65.5		993	835.7		mg/Kg		78	70 - 130

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

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5568-A-12-G MSD
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66452

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	<50.5	U	993	780.2		mg/Kg		76	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	65.5		993	875.3		mg/Kg		82	70 - 130	5	20
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	109		70 - 130								
o-Terphenyl	106		70 - 130								

Lab Sample ID: MB 880-66453/1-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66453

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		11/07/23 17:44	11/08/23 08:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 08:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/23 17:44	11/08/23 08:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	233	S1+	70 - 130			11/07/23 17:44	11/08/23 08:27	1
o-Terphenyl	214	S1+	70 - 130			11/07/23 17:44	11/08/23 08:27	1

Lab Sample ID: LCS 880-66453/2-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66453

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	915.5		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	795.7		mg/Kg		80	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	96		70 - 130				
o-Terphenyl	100		70 - 130				

Lab Sample ID: LCSD 880-66453/3-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66453

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	905.2		mg/Kg		91	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	779.1		mg/Kg		78	70 - 130	2	20

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: LCSD 880-66453/3-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66453

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	93		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 890-5567-3 MS
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: FS22
Prep Type: Total/NA
Prep Batch: 66453

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec	Limits
	Result	Qualifier		Result	Qualifier					
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	990	1226		mg/Kg		121	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.6	U	990	1209		mg/Kg		120	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	151	S1+	70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: 890-5567-3 MSD
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: FS22
Prep Type: Total/NA
Prep Batch: 66453

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec	%Rec	Limits	RPD	
	Result	Qualifier		Result	Qualifier						RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	990	1175		mg/Kg		115	70 - 130	4	20	
Diesel Range Organics (Over C10-C28)	<49.6	U	990	1202		mg/Kg		120	70 - 130	1	20	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	151	S1+	70 - 130
o-Terphenyl	122		70 - 130

Lab Sample ID: MB 880-66454/1-A
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66454

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/07/23 17:47	11/08/23 08:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/23 17:47	11/08/23 08:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/23 17:47	11/08/23 08:27	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	202	S1+	70 - 130	11/07/23 17:47	11/08/23 08:27	1
o-Terphenyl	227	S1+	70 - 130	11/07/23 17:47	11/08/23 08:27	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: LCS 880-66454/2-A
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	961.0		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	762.3		mg/Kg		76	70 - 130		
		LCS	LCS						
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	80		70 - 130						
o-Terphenyl	91		70 - 130						

Lab Sample ID: LCSD 880-66454/3-A
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
									RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	973.7		mg/Kg		97	70 - 130		1	20
Diesel Range Organics (Over C10-C28)	1000	751.9		mg/Kg		75	70 - 130		1	20
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	78		70 - 130							
o-Terphenyl	88		70 - 130							

Lab Sample ID: 890-5567-23 MS
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	1010	1157		mg/Kg		112	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.5	U	1010	1190		mg/Kg		115	70 - 130	
		MS	MS							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	168	S1+	70 - 130							
o-Terphenyl	162	S1+	70 - 130							

Lab Sample ID: 890-5567-23 MSD
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
											RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	1010	1070		mg/Kg		104	70 - 130		8	20
Diesel Range Organics (Over C10-C28)	<49.5	U	1010	1029		mg/Kg		99	70 - 130		14	20
		MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	145	S1+	70 - 130									

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5567-23 MSD
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Surrogate	MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	140	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66337/1-A
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/08/23 15:02	1

Lab Sample ID: LCS 880-66337/2-A
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.8		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-66337/3-A
Matrix: Solid
Analysis Batch: 66518

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	258.1		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5564-A-22-C MS
Matrix: Solid
Analysis Batch: 66518

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	399	F1	249	596.4	F1	mg/Kg		79	90 - 110

Lab Sample ID: 890-5564-A-22-F MSD
Matrix: Solid
Analysis Batch: 66518

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	399	F1	249	592.2	F1	mg/Kg		78	90 - 110	1	20

Lab Sample ID: MB 880-66339/1-A
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/08/23 18:19	1

QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-66339/2-A
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.2		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-66339/3-A
Matrix: Solid
Analysis Batch: 66519

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	258.3		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5567-5 MS
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: FS24
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	439		251	706.2		mg/Kg		107	90 - 110

Lab Sample ID: 890-5567-5 MSD
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: FS24
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	439		251	706.2		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-66380/1-A
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/08/23 11:39	1

Lab Sample ID: LCS 880-66380/2-A
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.6		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-66380/3-A
Matrix: Solid
Analysis Batch: 66529

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	258.2		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5567-14 MS
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: FS33
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	92.4		250	353.2		mg/Kg		105	90 - 110

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-5567-14 MSD
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: FS33
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	92.4		250	354.0		mg/Kg		105	90 - 110	0	20

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

QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

GC VOA

Prep Batch: 66374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66374/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 66433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	5035	
890-5567-2	FS21	Total/NA	Solid	5035	
890-5567-3	FS22	Total/NA	Solid	5035	
890-5567-4	FS23	Total/NA	Solid	5035	
890-5567-5	FS24	Total/NA	Solid	5035	
890-5567-6	FS25	Total/NA	Solid	5035	
890-5567-7	FS26	Total/NA	Solid	5035	
890-5567-8	FS27	Total/NA	Solid	5035	
890-5567-9	FS28	Total/NA	Solid	5035	
890-5567-10	FS29	Total/NA	Solid	5035	
890-5567-11	FS30	Total/NA	Solid	5035	
890-5567-12	FS31	Total/NA	Solid	5035	
890-5567-13	FS32	Total/NA	Solid	5035	
890-5567-14	FS33	Total/NA	Solid	5035	
890-5567-15	FS34	Total/NA	Solid	5035	
890-5567-16	FS35	Total/NA	Solid	5035	
890-5567-17	FS36	Total/NA	Solid	5035	
890-5567-18	SW06	Total/NA	Solid	5035	
890-5567-19	SW07	Total/NA	Solid	5035	
890-5567-20	SW08	Total/NA	Solid	5035	
MB 880-66433/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66433/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66433/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5567-1 MS	FS20	Total/NA	Solid	5035	
890-5567-1 MSD	FS20	Total/NA	Solid	5035	

Prep Batch: 66532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-21	SW09	Total/NA	Solid	5035	
890-5567-22	SW10	Total/NA	Solid	5035	
890-5567-23	FS37	Total/NA	Solid	5035	
890-5567-24	FS38	Total/NA	Solid	5035	
MB 880-66532/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-66532/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-66532/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5567-21 MS	SW09	Total/NA	Solid	5035	
890-5567-21 MSD	SW09	Total/NA	Solid	5035	

Prep Batch: 66611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-66611/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 66683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	8021B	66433
890-5567-2	FS21	Total/NA	Solid	8021B	66433
890-5567-3	FS22	Total/NA	Solid	8021B	66433

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

GC VOA (Continued)

Analysis Batch: 66683 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-4	FS23	Total/NA	Solid	8021B	66433
890-5567-5	FS24	Total/NA	Solid	8021B	66433
890-5567-6	FS25	Total/NA	Solid	8021B	66433
890-5567-7	FS26	Total/NA	Solid	8021B	66433
890-5567-8	FS27	Total/NA	Solid	8021B	66433
890-5567-9	FS28	Total/NA	Solid	8021B	66433
890-5567-10	FS29	Total/NA	Solid	8021B	66433
890-5567-11	FS30	Total/NA	Solid	8021B	66433
890-5567-12	FS31	Total/NA	Solid	8021B	66433
890-5567-13	FS32	Total/NA	Solid	8021B	66433
890-5567-14	FS33	Total/NA	Solid	8021B	66433
890-5567-15	FS34	Total/NA	Solid	8021B	66433
890-5567-16	FS35	Total/NA	Solid	8021B	66433
890-5567-17	FS36	Total/NA	Solid	8021B	66433
890-5567-18	SW06	Total/NA	Solid	8021B	66433
890-5567-19	SW07	Total/NA	Solid	8021B	66433
890-5567-20	SW08	Total/NA	Solid	8021B	66433
MB 880-66433/5-A	Method Blank	Total/NA	Solid	8021B	66433
MB 880-66611/5-A	Method Blank	Total/NA	Solid	8021B	66611
LCS 880-66433/1-A	Lab Control Sample	Total/NA	Solid	8021B	66433
LCSD 880-66433/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66433
890-5567-1 MS	FS20	Total/NA	Solid	8021B	66433
890-5567-1 MSD	FS20	Total/NA	Solid	8021B	66433

Analysis Batch: 66684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-21	SW09	Total/NA	Solid	8021B	66532
890-5567-22	SW10	Total/NA	Solid	8021B	66532
890-5567-23	FS37	Total/NA	Solid	8021B	66532
890-5567-24	FS38	Total/NA	Solid	8021B	66532
MB 880-66374/5-A	Method Blank	Total/NA	Solid	8021B	66374
MB 880-66532/5-A	Method Blank	Total/NA	Solid	8021B	66532
LCS 880-66532/1-A	Lab Control Sample	Total/NA	Solid	8021B	66532
LCSD 880-66532/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	66532
890-5567-21 MS	SW09	Total/NA	Solid	8021B	66532
890-5567-21 MSD	SW09	Total/NA	Solid	8021B	66532

Analysis Batch: 66857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	Total BTEX	
890-5567-2	FS21	Total/NA	Solid	Total BTEX	
890-5567-3	FS22	Total/NA	Solid	Total BTEX	
890-5567-4	FS23	Total/NA	Solid	Total BTEX	
890-5567-5	FS24	Total/NA	Solid	Total BTEX	
890-5567-6	FS25	Total/NA	Solid	Total BTEX	
890-5567-7	FS26	Total/NA	Solid	Total BTEX	
890-5567-8	FS27	Total/NA	Solid	Total BTEX	
890-5567-9	FS28	Total/NA	Solid	Total BTEX	
890-5567-10	FS29	Total/NA	Solid	Total BTEX	
890-5567-11	FS30	Total/NA	Solid	Total BTEX	
890-5567-12	FS31	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

GC VOA (Continued)

Analysis Batch: 66857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-13	FS32	Total/NA	Solid	Total BTEX	
890-5567-14	FS33	Total/NA	Solid	Total BTEX	
890-5567-15	FS34	Total/NA	Solid	Total BTEX	
890-5567-16	FS35	Total/NA	Solid	Total BTEX	
890-5567-17	FS36	Total/NA	Solid	Total BTEX	
890-5567-18	SW06	Total/NA	Solid	Total BTEX	
890-5567-19	SW07	Total/NA	Solid	Total BTEX	
890-5567-20	SW08	Total/NA	Solid	Total BTEX	
890-5567-21	SW09	Total/NA	Solid	Total BTEX	
890-5567-22	SW10	Total/NA	Solid	Total BTEX	
890-5567-23	FS37	Total/NA	Solid	Total BTEX	
890-5567-24	FS38	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 66452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	8015NM Prep	
890-5567-2	FS21	Total/NA	Solid	8015NM Prep	
MB 880-66452/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66452/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66452/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5568-A-12-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5568-A-12-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 66453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-3	FS22	Total/NA	Solid	8015NM Prep	
890-5567-4	FS23	Total/NA	Solid	8015NM Prep	
890-5567-5	FS24	Total/NA	Solid	8015NM Prep	
890-5567-6	FS25	Total/NA	Solid	8015NM Prep	
890-5567-7	FS26	Total/NA	Solid	8015NM Prep	
890-5567-8	FS27	Total/NA	Solid	8015NM Prep	
890-5567-9	FS28	Total/NA	Solid	8015NM Prep	
890-5567-10	FS29	Total/NA	Solid	8015NM Prep	
890-5567-11	FS30	Total/NA	Solid	8015NM Prep	
890-5567-12	FS31	Total/NA	Solid	8015NM Prep	
890-5567-13	FS32	Total/NA	Solid	8015NM Prep	
890-5567-14	FS33	Total/NA	Solid	8015NM Prep	
890-5567-15	FS34	Total/NA	Solid	8015NM Prep	
890-5567-16	FS35	Total/NA	Solid	8015NM Prep	
890-5567-17	FS36	Total/NA	Solid	8015NM Prep	
890-5567-18	SW06	Total/NA	Solid	8015NM Prep	
890-5567-19	SW07	Total/NA	Solid	8015NM Prep	
890-5567-20	SW08	Total/NA	Solid	8015NM Prep	
890-5567-21	SW09	Total/NA	Solid	8015NM Prep	
890-5567-22	SW10	Total/NA	Solid	8015NM Prep	
MB 880-66453/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66453/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66453/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5567-3 MS	FS22	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

GC Semi VOA (Continued)

Prep Batch: 66453 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-3 MSD	FS22	Total/NA	Solid	8015NM Prep	

Prep Batch: 66454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-23	FS37	Total/NA	Solid	8015NM Prep	
890-5567-24	FS38	Total/NA	Solid	8015NM Prep	
MB 880-66454/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-66454/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-66454/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5567-23 MS	FS37	Total/NA	Solid	8015NM Prep	
890-5567-23 MSD	FS37	Total/NA	Solid	8015NM Prep	

Analysis Batch: 66469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	8015B NM	66452
890-5567-2	FS21	Total/NA	Solid	8015B NM	66452
MB 880-66452/1-A	Method Blank	Total/NA	Solid	8015B NM	66452
LCS 880-66452/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66452
LCSD 880-66452/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66452
890-5568-A-12-F MS	Matrix Spike	Total/NA	Solid	8015B NM	66452
890-5568-A-12-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	66452

Analysis Batch: 66473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-3	FS22	Total/NA	Solid	8015B NM	66453
890-5567-4	FS23	Total/NA	Solid	8015B NM	66453
890-5567-5	FS24	Total/NA	Solid	8015B NM	66453
890-5567-6	FS25	Total/NA	Solid	8015B NM	66453
890-5567-7	FS26	Total/NA	Solid	8015B NM	66453
890-5567-8	FS27	Total/NA	Solid	8015B NM	66453
890-5567-9	FS28	Total/NA	Solid	8015B NM	66453
890-5567-10	FS29	Total/NA	Solid	8015B NM	66453
890-5567-11	FS30	Total/NA	Solid	8015B NM	66453
890-5567-12	FS31	Total/NA	Solid	8015B NM	66453
890-5567-13	FS32	Total/NA	Solid	8015B NM	66453
890-5567-14	FS33	Total/NA	Solid	8015B NM	66453
890-5567-15	FS34	Total/NA	Solid	8015B NM	66453
890-5567-16	FS35	Total/NA	Solid	8015B NM	66453
890-5567-17	FS36	Total/NA	Solid	8015B NM	66453
890-5567-18	SW06	Total/NA	Solid	8015B NM	66453
890-5567-19	SW07	Total/NA	Solid	8015B NM	66453
890-5567-20	SW08	Total/NA	Solid	8015B NM	66453
890-5567-21	SW09	Total/NA	Solid	8015B NM	66453
890-5567-22	SW10	Total/NA	Solid	8015B NM	66453
MB 880-66453/1-A	Method Blank	Total/NA	Solid	8015B NM	66453
LCS 880-66453/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66453
LCSD 880-66453/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66453
890-5567-3 MS	FS22	Total/NA	Solid	8015B NM	66453
890-5567-3 MSD	FS22	Total/NA	Solid	8015B NM	66453

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2Job ID: 890-5567-1
SDG: 32.53601,-103,688

GC Semi VOA

Analysis Batch: 66475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-23	FS37	Total/NA	Solid	8015B NM	66454
890-5567-24	FS38	Total/NA	Solid	8015B NM	66454
MB 880-66454/1-A	Method Blank	Total/NA	Solid	8015B NM	66454
LCS 880-66454/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	66454
LCSD 880-66454/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	66454
890-5567-23 MS	FS37	Total/NA	Solid	8015B NM	66454
890-5567-23 MSD	FS37	Total/NA	Solid	8015B NM	66454

Analysis Batch: 66583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Total/NA	Solid	8015 NM	
890-5567-2	FS21	Total/NA	Solid	8015 NM	
890-5567-3	FS22	Total/NA	Solid	8015 NM	
890-5567-4	FS23	Total/NA	Solid	8015 NM	
890-5567-5	FS24	Total/NA	Solid	8015 NM	
890-5567-6	FS25	Total/NA	Solid	8015 NM	
890-5567-7	FS26	Total/NA	Solid	8015 NM	
890-5567-8	FS27	Total/NA	Solid	8015 NM	
890-5567-9	FS28	Total/NA	Solid	8015 NM	
890-5567-10	FS29	Total/NA	Solid	8015 NM	
890-5567-11	FS30	Total/NA	Solid	8015 NM	
890-5567-12	FS31	Total/NA	Solid	8015 NM	
890-5567-13	FS32	Total/NA	Solid	8015 NM	
890-5567-14	FS33	Total/NA	Solid	8015 NM	
890-5567-15	FS34	Total/NA	Solid	8015 NM	
890-5567-16	FS35	Total/NA	Solid	8015 NM	
890-5567-17	FS36	Total/NA	Solid	8015 NM	
890-5567-18	SW06	Total/NA	Solid	8015 NM	
890-5567-19	SW07	Total/NA	Solid	8015 NM	
890-5567-20	SW08	Total/NA	Solid	8015 NM	
890-5567-21	SW09	Total/NA	Solid	8015 NM	
890-5567-22	SW10	Total/NA	Solid	8015 NM	
890-5567-23	FS37	Total/NA	Solid	8015 NM	
890-5567-24	FS38	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 66337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-16	FS35	Soluble	Solid	DI Leach	
890-5567-17	FS36	Soluble	Solid	DI Leach	
890-5567-18	SW06	Soluble	Solid	DI Leach	
890-5567-19	SW07	Soluble	Solid	DI Leach	
890-5567-20	SW08	Soluble	Solid	DI Leach	
890-5567-21	SW09	Soluble	Solid	DI Leach	
890-5567-22	SW10	Soluble	Solid	DI Leach	
890-5567-23	FS37	Soluble	Solid	DI Leach	
890-5567-24	FS38	Soluble	Solid	DI Leach	
MB 880-66337/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66337/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-66337/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
 SDG: 32.53601,-103,688

HPLC/IC (Continued)

Leach Batch: 66337 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5564-A-22-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5564-A-22-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 66339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Soluble	Solid	DI Leach	
890-5567-2	FS21	Soluble	Solid	DI Leach	
890-5567-3	FS22	Soluble	Solid	DI Leach	
890-5567-4	FS23	Soluble	Solid	DI Leach	
890-5567-5	FS24	Soluble	Solid	DI Leach	
890-5567-6	FS25	Soluble	Solid	DI Leach	
890-5567-7	FS26	Soluble	Solid	DI Leach	
890-5567-8	FS27	Soluble	Solid	DI Leach	
890-5567-9	FS28	Soluble	Solid	DI Leach	
890-5567-10	FS29	Soluble	Solid	DI Leach	
MB 880-66339/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66339/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 880-66339/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5567-5 MS	FS24	Soluble	Solid	DI Leach	
890-5567-5 MSD	FS24	Soluble	Solid	DI Leach	

Leach Batch: 66380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-11	FS30	Soluble	Solid	DI Leach	
890-5567-12	FS31	Soluble	Solid	DI Leach	
890-5567-13	FS32	Soluble	Solid	DI Leach	
890-5567-14	FS33	Soluble	Solid	DI Leach	
890-5567-15	FS34	Soluble	Solid	DI Leach	
MB 880-66380/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-66380/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 880-66380/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5567-14 MS	FS33	Soluble	Solid	DI Leach	
890-5567-14 MSD	FS33	Soluble	Solid	DI Leach	

Analysis Batch: 66518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-16	FS35	Soluble	Solid	300.0	66337
890-5567-17	FS36	Soluble	Solid	300.0	66337
890-5567-18	SW06	Soluble	Solid	300.0	66337
890-5567-19	SW07	Soluble	Solid	300.0	66337
890-5567-20	SW08	Soluble	Solid	300.0	66337
890-5567-21	SW09	Soluble	Solid	300.0	66337
890-5567-22	SW10	Soluble	Solid	300.0	66337
890-5567-23	FS37	Soluble	Solid	300.0	66337
890-5567-24	FS38	Soluble	Solid	300.0	66337
MB 880-66337/1-A	Method Blank	Soluble	Solid	300.0	66337
LCS 880-66337/2-A	Lab Control Sample	Soluble	Solid	300.0	66337
LCS 880-66337/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66337
890-5564-A-22-C MS	Matrix Spike	Soluble	Solid	300.0	66337
890-5564-A-22-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	66337

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

HPLC/IC

Analysis Batch: 66519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-1	FS20	Soluble	Solid	300.0	66339
890-5567-2	FS21	Soluble	Solid	300.0	66339
890-5567-3	FS22	Soluble	Solid	300.0	66339
890-5567-4	FS23	Soluble	Solid	300.0	66339
890-5567-5	FS24	Soluble	Solid	300.0	66339
890-5567-6	FS25	Soluble	Solid	300.0	66339
890-5567-7	FS26	Soluble	Solid	300.0	66339
890-5567-8	FS27	Soluble	Solid	300.0	66339
890-5567-9	FS28	Soluble	Solid	300.0	66339
890-5567-10	FS29	Soluble	Solid	300.0	66339
MB 880-66339/1-A	Method Blank	Soluble	Solid	300.0	66339
LCS 880-66339/2-A	Lab Control Sample	Soluble	Solid	300.0	66339
LCSD 880-66339/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66339
890-5567-5 MS	FS24	Soluble	Solid	300.0	66339
890-5567-5 MSD	FS24	Soluble	Solid	300.0	66339

Analysis Batch: 66529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5567-11	FS30	Soluble	Solid	300.0	66380
890-5567-12	FS31	Soluble	Solid	300.0	66380
890-5567-13	FS32	Soluble	Solid	300.0	66380
890-5567-14	FS33	Soluble	Solid	300.0	66380
890-5567-15	FS34	Soluble	Solid	300.0	66380
MB 880-66380/1-A	Method Blank	Soluble	Solid	300.0	66380
LCS 880-66380/2-A	Lab Control Sample	Soluble	Solid	300.0	66380
LCSD 880-66380/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	66380
890-5567-14 MS	FS33	Soluble	Solid	300.0	66380
890-5567-14 MSD	FS33	Soluble	Solid	300.0	66380

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS20

Lab Sample ID: 890-5567-1

Date Collected: 11/03/23 08:45

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 22:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 22:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 19:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66452	11/07/23 17:40	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66469	11/08/23 19:15	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:33	CH	EET MID

Client Sample ID: FS21

Lab Sample ID: 890-5567-2

Date Collected: 11/03/23 08:50

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 22:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 22:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 19:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	66452	11/07/23 17:40	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66469	11/08/23 19:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:38	CH	EET MID

Client Sample ID: FS22

Lab Sample ID: 890-5567-3

Date Collected: 11/03/23 08:55

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 22:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 22:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 11:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 11:04	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:44	CH	EET MID

Client Sample ID: FS23

Lab Sample ID: 890-5567-4

Date Collected: 11/03/23 09:00

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 23:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 23:20	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS23

Lab Sample ID: 890-5567-4

Date Collected: 11/03/23 09:00

Matrix: Solid

Date Received: 11/03/23 14:50

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			66583	11/08/23 12:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 12:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:49	CH	EET MID

Client Sample ID: FS24

Lab Sample ID: 890-5567-5

Date Collected: 11/03/23 09:25

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/10/23 23:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/10/23 23:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 12:34	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 12:34	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 19:55	CH	EET MID

Client Sample ID: FS25

Lab Sample ID: 890-5567-6

Date Collected: 11/03/23 09:30

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 00:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 00:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 12:56	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:12	CH	EET MID

Client Sample ID: FS26

Lab Sample ID: 890-5567-7

Date Collected: 11/03/23 09:15

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 00:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 00:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 13:18	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 13:18	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS26

Lab Sample ID: 890-5567-7

Date Collected: 11/03/23 09:15

Matrix: Solid

Date Received: 11/03/23 14:50

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	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:18	CH	EET MID

Client Sample ID: FS27

Lab Sample ID: 890-5567-8

Date Collected: 11/03/23 09:20

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 00:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 00:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 13:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 13:40	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:35	CH	EET MID

Client Sample ID: FS28

Lab Sample ID: 890-5567-9

Date Collected: 11/03/23 10:55

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 01:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 01:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 14:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 14:02	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:40	CH	EET MID

Client Sample ID: FS29

Lab Sample ID: 890-5567-10

Date Collected: 11/03/23 11:00

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 01:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 01:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 14:23	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 14:23	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	66339	11/06/23 20:22	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66519	11/08/23 20:46	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS30

Lab Sample ID: 890-5567-11

Date Collected: 11/03/23 11:45

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 02:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 02:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 14:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 14:45	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:14	CH	EET MID

Client Sample ID: FS31

Lab Sample ID: 890-5567-12

Date Collected: 11/03/23 11:10

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 15:06	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 15:06	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:20	CH	EET MID

Client Sample ID: FS32

Lab Sample ID: 890-5567-13

Date Collected: 11/03/23 11:15

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 15:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 15:51	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:25	CH	EET MID

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:49	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20

Matrix: Solid

Date Received: 11/03/23 14:50

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			66583	11/08/23 16:13	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 16:13	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:31	CH	EET MID

Client Sample ID: FS34

Lab Sample ID: 890-5567-15

Date Collected: 11/03/23 11:50

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 04:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 04:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 16:35	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 16:35	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:48	CH	EET MID

Client Sample ID: FS35

Lab Sample ID: 890-5567-16

Date Collected: 11/03/23 11:30

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 04:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 04:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 16:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 16:58	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:36	CH	EET MID

Client Sample ID: FS36

Lab Sample ID: 890-5567-17

Date Collected: 11/03/23 12:35

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 04:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 04:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 17:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 17:20	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS36

Lab Sample ID: 890-5567-17

Date Collected: 11/03/23 12:35

Matrix: Solid

Date Received: 11/03/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:42	CH	EET MID

Client Sample ID: SW06

Lab Sample ID: 890-5567-18

Date Collected: 11/03/23 10:10

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 17:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 17:42	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:47	CH	EET MID

Client Sample ID: SW07

Lab Sample ID: 890-5567-19

Date Collected: 11/03/23 11:35

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 18:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 18:05	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:53	CH	EET MID

Client Sample ID: SW08

Lab Sample ID: 890-5567-20

Date Collected: 11/03/23 13:00

Matrix: Solid

Date Received: 11/03/23 14:50

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	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 18:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 18:27	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:10	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: SW09

Lab Sample ID: 890-5567-21

Date Collected: 11/03/23 11:40

Matrix: Solid

Date Received: 11/03/23 14:50

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	66532	11/08/23 11:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/12/23 00:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/12/23 00:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 18:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 18:49	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:15	CH	EET MID

Client Sample ID: SW10

Lab Sample ID: 890-5567-22

Date Collected: 11/03/23 13:30

Matrix: Solid

Date Received: 11/03/23 14:50

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	66532	11/08/23 11:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/12/23 01:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/12/23 01:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 19:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 19:11	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:21	CH	EET MID

Client Sample ID: FS37

Lab Sample ID: 890-5567-23

Date Collected: 11/03/23 13:35

Matrix: Solid

Date Received: 11/03/23 14:50

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	66532	11/08/23 11:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/12/23 01:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/12/23 01:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 11:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	66454	11/07/23 17:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66475	11/08/23 11:04	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:27	CH	EET MID

Client Sample ID: FS38

Lab Sample ID: 890-5567-24

Date Collected: 11/03/23 14:00

Matrix: Solid

Date Received: 11/03/23 14:50

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	66532	11/08/23 11:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66684	11/12/23 01:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/12/23 01:45	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS38

Lab Sample ID: 890-5567-24

Date Collected: 11/03/23 14:00

Matrix: Solid

Date Received: 11/03/23 14:50

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			66583	11/08/23 12:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66454	11/07/23 17:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66475	11/08/23 12:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:32	CH	EET MID

Laboratory References:

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

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

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

Method Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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: Hat Mesa 32-2

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-5567-1	FS20	Solid	11/03/23 08:45	11/03/23 14:50
890-5567-2	FS21	Solid	11/03/23 08:50	11/03/23 14:50
890-5567-3	FS22	Solid	11/03/23 08:55	11/03/23 14:50
890-5567-4	FS23	Solid	11/03/23 09:00	11/03/23 14:50
890-5567-5	FS24	Solid	11/03/23 09:25	11/03/23 14:50
890-5567-6	FS25	Solid	11/03/23 09:30	11/03/23 14:50
890-5567-7	FS26	Solid	11/03/23 09:15	11/03/23 14:50
890-5567-8	FS27	Solid	11/03/23 09:20	11/03/23 14:50
890-5567-9	FS28	Solid	11/03/23 10:55	11/03/23 14:50
890-5567-10	FS29	Solid	11/03/23 11:00	11/03/23 14:50
890-5567-11	FS30	Solid	11/03/23 11:45	11/03/23 14:50
890-5567-12	FS31	Solid	11/03/23 11:10	11/03/23 14:50
890-5567-13	FS32	Solid	11/03/23 11:15	11/03/23 14:50
890-5567-14	FS33	Solid	11/03/23 11:20	11/03/23 14:50
890-5567-15	FS34	Solid	11/03/23 11:50	11/03/23 14:50
890-5567-16	FS35	Solid	11/03/23 11:30	11/03/23 14:50
890-5567-17	FS36	Solid	11/03/23 12:35	11/03/23 14:50
890-5567-18	SW06	Solid	11/03/23 10:10	11/03/23 14:50
890-5567-19	SW07	Solid	11/03/23 11:35	11/03/23 14:50
890-5567-20	SW08	Solid	11/03/23 13:00	11/03/23 14:50
890-5567-21	SW09	Solid	11/03/23 11:40	11/03/23 14:50
890-5567-22	SW10	Solid	11/03/23 13:30	11/03/23 14:50
890-5567-23	FS37	Solid	11/03/23 13:35	11/03/23 14:50
890-5567-24	FS38	Solid	11/03/23 14:00	11/03/23 14:50

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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) 509-3324
 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



Environment Testing

XENCO

Work Order No:

www.xenco.com Page 1 of 3

Project Manager:	Ben Belli	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XIO Energy
Address:	3122 Nat'l Parks Hwy	Address:	3104 Greens St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	bbelli@ensolum.com

Project Name:	HAT MESA 32-2	Turn Around	
Project Number:	0301558249	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location:	32-53601, 703-688	Due Date:	
Sampler's Name:	Meredith Roberts	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	Parameters		Pres. Code	ANALYSIS REQUEST	Preservative Codes
						Grab/Comp	# of Cont			
FS20	S	11/3/23	0845	3'	C					None: NO DI Water: H ₂ O Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SACP
FS21			0850	3.5'						
FS22			0855	3'						
FS23			0900							
FS24			0915							
FS25			0930							
FS26			0915							
FS27			0920							
FS28			1055							
FS29			1100							



BTX X
 Chlorides X
 TPE X

Incident #: 0APP2316046257
 Cost Center: 1148831001
 mroberts@ensolum.com

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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 16311 / 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
<i>Sheddy</i>	<i>alberta</i>				
		11/49 10/3			

Received Date: 08/25/2020 Rev. 2020.2



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) 794-7296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenoco



Work Order No:

www.xenoco.com Page 2 of 3

Project Manager: **Ben Bell**
 Company Name: **Enselwm, LLC**
 Address: **3122 Nati Parks Hwy**
 City, State ZIP: **Carlsbad, NM 88220**
 Phone: **989-854-0852** Email: **bbell@enselwm.com**

Bill to: (if different) **Garrett Green**
 Company Name: **XTO Energy**
 Address: **3104 E Greene St**
 City, State ZIP: **Carlsbad, NM 88220**

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

Project Name: **HAI MESA 32-2**
 Project Number: **03C1558249**
 Project Location: **32-53601-103-688**
 Sampler's Name: **Meredith Roberts**
 PO #:

Turn Around: Routine Rush
 Due Date: **TAT starts the day received by the lab, if received by 4:30pm**

Temp Blank: Yes No
 Thermometer ID:
 Cooler Custody Seals: Yes No N/A
 Correction Factor:
 Sample Custody Seals: Yes No N/A
 Temperature Reading:
 Corrected Temperature:

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters		Pres. Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
							Yes	No				
FS30	S	11/3/23	3'	1115	C	1				None: NO DI Water: H ₂ O Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ NaOH: Na H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SACP	Cost Center: 1148831001	
FS31				1110								Incident #: NAPP2316046257
FS32				1115								member@enselwm.com
FS33				1120								
FS34				1150								
FS35				1130								
FS36				1235								
SW06			0-3.5'	1000								
SW07			0-3'	1010								
SW08			0-3'	1135								

Total 2007/6010 2008/6020: 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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631/245.1/7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenoco 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 Xenoco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenoco, 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
<i>Meredith Roberts</i>	<i>Ben Bell</i>	11/3/23 10:22			



Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5567-1
SDG Number: 32.53601,-103,688

Login Number: 5567
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	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5567-1
SDG Number: 32.53601,-103,688

Login Number: 5567
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 11/07/23 12:07 PM

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

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 12/4/2023 12:19:07 PM

JOB DESCRIPTION

Hat Mesa 32-2
 03C1558249

JOB NUMBER

890-5674-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



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
12/4/2023 12:19:07 PM

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

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Client: Ensolum
Project/Site: Hat Mesa 32-2

Laboratory Job ID: 890-5674-1
SDG: 03C1558249

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Definitions/Glossary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Qualifiers

GC 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.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Job ID: 890-5674-1

Laboratory: Eurofins Carlsbad**Narrative****Job Narrative
890-5674-1**

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/21/2023 3:16 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 4.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS17A (890-5674-1), FS18A (890-5674-2), FS19A (890-5674-3), FS16A (890-5674-4), SW11 (890-5674-5) and FS04A (890-5674-6).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67964 and analytical batch 880-68011 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-67964/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS19A (890-5674-3), FS16A (890-5674-4) and SW11 (890-5674-5). 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: (MB 880-67908/5-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-67891/20), (CCV 880-67891/31), (CCV 880-67891/47), (CCV 880-67891/5), (CCV 880-67891/58) and (LCS 880-67828/2-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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



Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Client Sample ID: FS17A

Lab Sample ID: 890-5674-1

Date Collected: 11/21/23 12:40

Matrix: Solid

Date Received: 11/21/23 15:16

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		11/29/23 16:04	12/01/23 12:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/29/23 16:04	12/01/23 12:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/29/23 16:04	12/01/23 12:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/29/23 16:04	12/01/23 12:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/29/23 16:04	12/01/23 12:41	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/29/23 16:04	12/01/23 12:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	11/29/23 16:04	12/01/23 12:41	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/29/23 16:04	12/01/23 12:41	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			12/01/23 12:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			11/29/23 16:44	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	<50.1	U	50.1	mg/Kg		11/28/23 14:43	11/29/23 16:44	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		11/28/23 14:43	11/29/23 16:44	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		11/28/23 14:43	11/29/23 16:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	11/28/23 14:43	11/29/23 16:44	1
o-Terphenyl	93		70 - 130	11/28/23 14:43	11/29/23 16:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.85		5.02	mg/Kg			11/29/23 01:00	1

Client Sample ID: FS18A

Lab Sample ID: 890-5674-2

Date Collected: 11/21/23 10:20

Matrix: Solid

Date Received: 11/21/23 15:16

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		11/29/23 16:04	12/01/23 13:07	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/29/23 16:04	12/01/23 13:07	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/29/23 16:04	12/01/23 13:07	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/29/23 16:04	12/01/23 13:07	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/29/23 16:04	12/01/23 13:07	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/29/23 16:04	12/01/23 13:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	11/29/23 16:04	12/01/23 13:07	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Client Sample ID: FS18A

Lab Sample ID: 890-5674-2

Date Collected: 11/21/23 10:20

Matrix: Solid

Date Received: 11/21/23 15:16

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	11/29/23 16:04	12/01/23 13:07	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			12/01/23 13:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			11/29/23 17:07	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	<50.4	U	50.4	mg/Kg		11/28/23 14:43	11/29/23 17:07	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		11/28/23 14:43	11/29/23 17:07	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		11/28/23 14:43	11/29/23 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130	11/28/23 14:43	11/29/23 17:07	1
o-Terphenyl	82		70 - 130	11/28/23 14:43	11/29/23 17:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.9		4.99	mg/Kg			11/29/23 01:17	1

Client Sample ID: FS19A

Lab Sample ID: 890-5674-3

Date Collected: 11/21/23 12:45

Matrix: Solid

Date Received: 11/21/23 15:16

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		11/29/23 16:04	12/01/23 13:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 13:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 13:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/29/23 16:04	12/01/23 13:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 13:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/29/23 16:04	12/01/23 13:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130	11/29/23 16:04	12/01/23 13:33	1
1,4-Difluorobenzene (Surr)	126		70 - 130	11/29/23 16:04	12/01/23 13:33	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/01/23 13:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			11/29/23 17:29	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Client Sample ID: FS19A

Lab Sample ID: 890-5674-3

Date Collected: 11/21/23 12:45

Matrix: Solid

Date Received: 11/21/23 15:16

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		11/28/23 14:43	11/29/23 17:29	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		11/28/23 14:43	11/29/23 17:29	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		11/28/23 14:43	11/29/23 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	11/28/23 14:43	11/29/23 17:29	1
o-Terphenyl	87		70 - 130	11/28/23 14:43	11/29/23 17:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.3		5.02	mg/Kg			11/29/23 01:22	1

Client Sample ID: FS16A

Lab Sample ID: 890-5674-4

Date Collected: 11/21/23 12:35

Matrix: Solid

Date Received: 11/21/23 15:16

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		11/29/23 16:04	12/01/23 13:59	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 13:59	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 13:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/29/23 16:04	12/01/23 13:59	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 13:59	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/29/23 16:04	12/01/23 13:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	168	S1+	70 - 130	11/29/23 16:04	12/01/23 13:59	1
1,4-Difluorobenzene (Surr)	162	S1+	70 - 130	11/29/23 16:04	12/01/23 13:59	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			12/01/23 13:59	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			11/29/23 17:52	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		11/28/23 14:43	11/29/23 17:52	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/28/23 14:43	11/29/23 17:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/28/23 14:43	11/29/23 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	11/28/23 14:43	11/29/23 17:52	1
o-Terphenyl	88		70 - 130	11/28/23 14:43	11/29/23 17:52	1

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Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Client Sample ID: FS16A

Lab Sample ID: 890-5674-4

Date Collected: 11/21/23 12:35

Matrix: Solid

Date Received: 11/21/23 15:16

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.0		4.97	mg/Kg			11/29/23 01:28	1

Client Sample ID: SW11

Lab Sample ID: 890-5674-5

Date Collected: 11/21/23 10:30

Matrix: Solid

Date Received: 11/21/23 15:16

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		11/29/23 16:04	12/01/23 14:25	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 14:25	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 14:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/29/23 16:04	12/01/23 14:25	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/29/23 16:04	12/01/23 14:25	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/29/23 16:04	12/01/23 14:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130			11/29/23 16:04	12/01/23 14:25	1
1,4-Difluorobenzene (Surr)	110		70 - 130			11/29/23 16:04	12/01/23 14:25	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			12/01/23 14:25	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			11/29/23 18:14	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		11/28/23 14:43	11/29/23 18:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/28/23 14:43	11/29/23 18:14	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/28/23 14:43	11/29/23 18:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			11/28/23 14:43	11/29/23 18:14	1
o-Terphenyl	106		70 - 130			11/28/23 14:43	11/29/23 18:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.7		5.05	mg/Kg			11/29/23 01:34	1

Client Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Client Sample ID: FS04A

Lab Sample ID: 890-5674-6

Date Collected: 11/21/23 12:50

Matrix: Solid

Date Received: 11/21/23 15:16

Sample Depth: 5

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		11/29/23 16:04	12/01/23 14:51	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/29/23 16:04	12/01/23 14:51	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/29/23 16:04	12/01/23 14:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/29/23 16:04	12/01/23 14:51	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/29/23 16:04	12/01/23 14:51	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/29/23 16:04	12/01/23 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	11/29/23 16:04	12/01/23 14:51	1
1,4-Difluorobenzene (Surr)	130		70 - 130	11/29/23 16:04	12/01/23 14:51	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			12/01/23 14:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			11/29/23 18:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		11/28/23 14:43	11/29/23 18:36	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		11/28/23 14:43	11/29/23 18:36	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		11/28/23 14:43	11/29/23 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	11/28/23 14:43	11/29/23 18:36	1
o-Terphenyl	94		70 - 130	11/28/23 14:43	11/29/23 18:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.12		5.00	mg/Kg			11/29/23 01:50	1

Surrogate Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-36143-A-1-C MS	Matrix Spike	102	94
880-36143-A-1-D MSD	Matrix Spike Duplicate	102	102
890-5674-1	FS17A	128	100
890-5674-2	FS18A	116	98
890-5674-3	FS19A	154 S1+	126
890-5674-4	FS16A	168 S1+	162 S1+
890-5674-5	SW11	133 S1+	110
890-5674-6	FS04A	120	130
LCS 880-67964/1-A	Lab Control Sample	108	92
LCSD 880-67964/2-A	Lab Control Sample Dup	118	111
MB 880-67908/5-A	Method Blank	65 S1-	101
MB 880-67964/5-A	Method Blank	64 S1-	102

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5668-A-11-D MS	Matrix Spike	113	113
890-5668-A-11-E MSD	Matrix Spike Duplicate	115	114
890-5674-1	FS17A	88	93
890-5674-2	FS18A	80	82
890-5674-3	FS19A	84	87
890-5674-4	FS16A	84	88
890-5674-5	SW11	105	106
890-5674-6	FS04A	89	94
LCS 880-67828/2-A	Lab Control Sample	114	131 S1+
LCSD 880-67828/3-A	Lab Control Sample Dup	103	121
MB 880-67828/1-A	Method Blank	108	124

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67908/5-A
Matrix: Solid
Analysis Batch: 68011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67908

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		11/29/23 10:26	11/30/23 15:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/29/23 10:26	11/30/23 15:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/29/23 10:26	11/30/23 15:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/29/23 10:26	11/30/23 15:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/29/23 10:26	11/30/23 15:46	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/29/23 10:26	11/30/23 15:46	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130			11/29/23 10:26	11/30/23 15:46	1
1,4-Difluorobenzene (Surr)	101		70 - 130			11/29/23 10:26	11/30/23 15:46	1

Lab Sample ID: MB 880-67964/5-A
Matrix: Solid
Analysis Batch: 68011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67964

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		11/29/23 16:04	12/01/23 04:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/29/23 16:04	12/01/23 04:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/29/23 16:04	12/01/23 04:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/29/23 16:04	12/01/23 04:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/29/23 16:04	12/01/23 04:33	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/29/23 16:04	12/01/23 04:33	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130			11/29/23 16:04	12/01/23 04:33	1
1,4-Difluorobenzene (Surr)	102		70 - 130			11/29/23 16:04	12/01/23 04:33	1

Lab Sample ID: LCS 880-67964/1-A
Matrix: Solid
Analysis Batch: 68011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 67964

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	0.100	0.07606		mg/Kg		76	70 - 130
Ethylbenzene	0.100	0.08315		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1611		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08854		mg/Kg		89	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	108		70 - 130				
1,4-Difluorobenzene (Surr)	92		70 - 130				

Lab Sample ID: LCSD 880-67964/2-A
Matrix: Solid
Analysis Batch: 68011

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 67964

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Benzene	0.100	0.08198		mg/Kg		82	70 - 130	3	35

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

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

Lab Sample ID: LCSD 880-67964/2-A
Matrix: Solid
Analysis Batch: 68011

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 67964

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Toluene	0.100	0.07865		mg/Kg		79	70 - 130	3	35	
Ethylbenzene	0.100	0.08701		mg/Kg		87	70 - 130	5	35	
m-Xylene & p-Xylene	0.200	0.1698		mg/Kg		85	70 - 130	5	35	
o-Xylene	0.100	0.08544		mg/Kg		85	70 - 130	4	35	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	118		70 - 130							
1,4-Difluorobenzene (Surr)	111		70 - 130							

Lab Sample ID: 880-36143-A-1-C MS
Matrix: Solid
Analysis Batch: 68011

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 67964

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Benzene	<0.00199	U	0.0996	0.07313		mg/Kg		73	70 - 130		35	
Toluene	<0.00199	U	0.0996	0.07287		mg/Kg		73	70 - 130		35	
Ethylbenzene	<0.00199	U F1	0.0996	0.06371	F1	mg/Kg		64	70 - 130		35	
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1435		mg/Kg		72	70 - 130		35	
o-Xylene	<0.00199	U F1	0.0996	0.06858	F1	mg/Kg		69	70 - 130		35	
		MS	MS									
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	102		70 - 130									
1,4-Difluorobenzene (Surr)	94		70 - 130									

Lab Sample ID: 880-36143-A-1-D MSD
Matrix: Solid
Analysis Batch: 68011

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 67964

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Benzene	<0.00199	U	0.0990	0.08931		mg/Kg		90	70 - 130	20	35	
Toluene	<0.00199	U	0.0990	0.08496		mg/Kg		86	70 - 130	15	35	
Ethylbenzene	<0.00199	U F1	0.0990	0.08220		mg/Kg		83	70 - 130	25	35	
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1600		mg/Kg		81	70 - 130	11	35	
o-Xylene	<0.00199	U F1	0.0990	0.08501		mg/Kg		86	70 - 130	21	35	
		MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	102		70 - 130									
1,4-Difluorobenzene (Surr)	102		70 - 130									

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

Lab Sample ID: MB 880-67828/1-A
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67828

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/28/23 10:15	11/29/23 08:03	1

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

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

Lab Sample ID: MB 880-67828/1-A
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67828

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/28/23 10:15	11/29/23 08:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/28/23 10:15	11/29/23 08:03	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	108		70 - 130	11/28/23 10:15	11/29/23 08:03	1
o-Terphenyl	124		70 - 130	11/28/23 10:15	11/29/23 08:03	1

Lab Sample ID: LCS 880-67828/2-A
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 67828

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	946.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1039		mg/Kg		104	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	114		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: LCSD 880-67828/3-A
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 67828

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	1000	918.3		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	969.7		mg/Kg		97	70 - 130	7	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	103		70 - 130
o-Terphenyl	121		70 - 130

Lab Sample ID: 890-5668-A-11-D MS
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 67828

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	1010	1141		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	<50.4	U	1010	832.6		mg/Kg		79	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	113		70 - 130
o-Terphenyl	113		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

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

Lab Sample ID: 890-5668-A-11-E MSD
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 67828

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	<50.4	U	1010	1130		mg/Kg		107	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.4	U	1010	855.4		mg/Kg		81	70 - 130	3	20
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
1-Chlorooctane	115		70 - 130								
o-Terphenyl	114		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67792/1-A
Matrix: Solid
Analysis Batch: 67879

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/29/23 00:43	1

Lab Sample ID: LCS 880-67792/2-A
Matrix: Solid
Analysis Batch: 67879

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	243.5		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-67792/3-A
Matrix: Solid
Analysis Batch: 67879

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	247.3		mg/Kg		99	90 - 110	2	20

Lab Sample ID: 890-5674-1 MS
Matrix: Solid
Analysis Batch: 67879

Client Sample ID: FS17A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	6.85		251	260.9		mg/Kg		101	90 - 110

Lab Sample ID: 890-5674-1 MSD
Matrix: Solid
Analysis Batch: 67879

Client Sample ID: FS17A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6.85		251	261.4		mg/Kg		101	90 - 110	0	20

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QC Association Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
 SDG: 03C1558249

GC VOA

Prep Batch: 67908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67908/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 67964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-1	FS17A	Total/NA	Solid	5035	
890-5674-2	FS18A	Total/NA	Solid	5035	
890-5674-3	FS19A	Total/NA	Solid	5035	
890-5674-4	FS16A	Total/NA	Solid	5035	
890-5674-5	SW11	Total/NA	Solid	5035	
890-5674-6	FS04A	Total/NA	Solid	5035	
MB 880-67964/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67964/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67964/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-36143-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-36143-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 68011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-1	FS17A	Total/NA	Solid	8021B	67964
890-5674-2	FS18A	Total/NA	Solid	8021B	67964
890-5674-3	FS19A	Total/NA	Solid	8021B	67964
890-5674-4	FS16A	Total/NA	Solid	8021B	67964
890-5674-5	SW11	Total/NA	Solid	8021B	67964
890-5674-6	FS04A	Total/NA	Solid	8021B	67964
MB 880-67908/5-A	Method Blank	Total/NA	Solid	8021B	67908
MB 880-67964/5-A	Method Blank	Total/NA	Solid	8021B	67964
LCS 880-67964/1-A	Lab Control Sample	Total/NA	Solid	8021B	67964
LCSD 880-67964/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67964
880-36143-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	67964
880-36143-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67964

Analysis Batch: 68161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-1	FS17A	Total/NA	Solid	Total BTEX	
890-5674-2	FS18A	Total/NA	Solid	Total BTEX	
890-5674-3	FS19A	Total/NA	Solid	Total BTEX	
890-5674-4	FS16A	Total/NA	Solid	Total BTEX	
890-5674-5	SW11	Total/NA	Solid	Total BTEX	
890-5674-6	FS04A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 67828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-1	FS17A	Total/NA	Solid	8015NM Prep	
890-5674-2	FS18A	Total/NA	Solid	8015NM Prep	
890-5674-3	FS19A	Total/NA	Solid	8015NM Prep	
890-5674-4	FS16A	Total/NA	Solid	8015NM Prep	
890-5674-5	SW11	Total/NA	Solid	8015NM Prep	
890-5674-6	FS04A	Total/NA	Solid	8015NM Prep	
MB 880-67828/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

GC Semi VOA (Continued)

Prep Batch: 67828 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-67828/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67828/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5668-A-11-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5668-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 67891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-1	FS17A	Total/NA	Solid	8015B NM	67828
890-5674-2	FS18A	Total/NA	Solid	8015B NM	67828
890-5674-3	FS19A	Total/NA	Solid	8015B NM	67828
890-5674-4	FS16A	Total/NA	Solid	8015B NM	67828
890-5674-5	SW11	Total/NA	Solid	8015B NM	67828
890-5674-6	FS04A	Total/NA	Solid	8015B NM	67828
MB 880-67828/1-A	Method Blank	Total/NA	Solid	8015B NM	67828
LCS 880-67828/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67828
LCSD 880-67828/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67828
890-5668-A-11-D MS	Matrix Spike	Total/NA	Solid	8015B NM	67828
890-5668-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67828

Analysis Batch: 68036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-1	FS17A	Total/NA	Solid	8015 NM	
890-5674-2	FS18A	Total/NA	Solid	8015 NM	
890-5674-3	FS19A	Total/NA	Solid	8015 NM	
890-5674-4	FS16A	Total/NA	Solid	8015 NM	
890-5674-5	SW11	Total/NA	Solid	8015 NM	
890-5674-6	FS04A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 67792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-1	FS17A	Soluble	Solid	DI Leach	
890-5674-2	FS18A	Soluble	Solid	DI Leach	
890-5674-3	FS19A	Soluble	Solid	DI Leach	
890-5674-4	FS16A	Soluble	Solid	DI Leach	
890-5674-5	SW11	Soluble	Solid	DI Leach	
890-5674-6	FS04A	Soluble	Solid	DI Leach	
MB 880-67792/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67792/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67792/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5674-1 MS	FS17A	Soluble	Solid	DI Leach	
890-5674-1 MSD	FS17A	Soluble	Solid	DI Leach	

Analysis Batch: 67879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-1	FS17A	Soluble	Solid	300.0	67792
890-5674-2	FS18A	Soluble	Solid	300.0	67792
890-5674-3	FS19A	Soluble	Solid	300.0	67792
890-5674-4	FS16A	Soluble	Solid	300.0	67792
890-5674-5	SW11	Soluble	Solid	300.0	67792

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QC Association Summary

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

HPLC/IC (Continued)

Analysis Batch: 67879 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5674-6	FS04A	Soluble	Solid	300.0	67792
MB 880-67792/1-A	Method Blank	Soluble	Solid	300.0	67792
LCS 880-67792/2-A	Lab Control Sample	Soluble	Solid	300.0	67792
LCSD 880-67792/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67792
890-5674-1 MS	FS17A	Soluble	Solid	300.0	67792
890-5674-1 MSD	FS17A	Soluble	Solid	300.0	67792

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Lab Chronicle

Client: Ensolum
Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Client Sample ID: FS17A

Lab Sample ID: 890-5674-1

Date Collected: 11/21/23 12:40

Matrix: Solid

Date Received: 11/21/23 15:16

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	67964	11/29/23 16:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	68011	12/01/23 12:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68161	12/01/23 12:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			68036	11/29/23 16:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	67828	11/28/23 14:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67891	11/29/23 16:44	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67792	11/27/23 17:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67879	11/29/23 01:00	CH	EET MID

Client Sample ID: FS18A

Lab Sample ID: 890-5674-2

Date Collected: 11/21/23 10:20

Matrix: Solid

Date Received: 11/21/23 15:16

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	67964	11/29/23 16:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	68011	12/01/23 13:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68161	12/01/23 13:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			68036	11/29/23 17:07	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	67828	11/28/23 14:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67891	11/29/23 17:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	67792	11/27/23 17:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67879	11/29/23 01:17	CH	EET MID

Client Sample ID: FS19A

Lab Sample ID: 890-5674-3

Date Collected: 11/21/23 12:45

Matrix: Solid

Date Received: 11/21/23 15:16

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	67964	11/29/23 16:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	68011	12/01/23 13:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68161	12/01/23 13:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			68036	11/29/23 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	67828	11/28/23 14:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67891	11/29/23 17:29	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	67792	11/27/23 17:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67879	11/29/23 01:22	CH	EET MID

Client Sample ID: FS16A

Lab Sample ID: 890-5674-4

Date Collected: 11/21/23 12:35

Matrix: Solid

Date Received: 11/21/23 15:16

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	67964	11/29/23 16:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	68011	12/01/23 13:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68161	12/01/23 13:59	SM	EET MID

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Lab Chronicle

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
 SDG: 03C1558249

Client Sample ID: FS16A

Lab Sample ID: 890-5674-4

Date Collected: 11/21/23 12:35

Matrix: Solid

Date Received: 11/21/23 15:16

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			68036	11/29/23 17:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	67828	11/28/23 14:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67891	11/29/23 17:52	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	67792	11/27/23 17:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67879	11/29/23 01:28	CH	EET MID

Client Sample ID: SW11

Lab Sample ID: 890-5674-5

Date Collected: 11/21/23 10:30

Matrix: Solid

Date Received: 11/21/23 15:16

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	67964	11/29/23 16:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	68011	12/01/23 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68161	12/01/23 14:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			68036	11/29/23 18:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	67828	11/28/23 14:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67891	11/29/23 18:14	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	67792	11/27/23 17:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67879	11/29/23 01:34	CH	EET MID

Client Sample ID: FS04A

Lab Sample ID: 890-5674-6

Date Collected: 11/21/23 12:50

Matrix: Solid

Date Received: 11/21/23 15:16

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	67964	11/29/23 16:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	68011	12/01/23 14:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68161	12/01/23 14:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			68036	11/29/23 18:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	67828	11/28/23 14:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67891	11/29/23 18:36	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	67792	11/27/23 17:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67879	11/29/23 01:50	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: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

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	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

- 1
- 2
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- 12
- 13
- 14

Method Summary

Client: Ensolum
 Project/Site: Hat Mesa 32-2

Job ID: 890-5674-1
 SDG: 03C1558249

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: Hat Mesa 32-2

Job ID: 890-5674-1
SDG: 03C1558249

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5674-1	FS17A	Solid	11/21/23 12:40	11/21/23 15:16	4
890-5674-2	FS18A	Solid	11/21/23 10:20	11/21/23 15:16	4
890-5674-3	FS19A	Solid	11/21/23 12:45	11/21/23 15:16	4
890-5674-4	FS16A	Solid	11/21/23 12:35	11/21/23 15:16	4
890-5674-5	SW11	Solid	11/21/23 10:30	11/21/23 15:16	0-4
890-5674-6	FS04A	Solid	11/21/23 12:50	11/21/23 15:16	5

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- 14

Chain of Custody



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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager: Ben Belli
 Company Name: ENSOLUM, LLC
 Address: 3122 National Parks Hwy
 City, State ZIP: CARLSBAD, NM 88220
 Phone: 989-854-0852 Email: Garrett.Green@ExxonMobil.com

Bill to: (if different)
 Company Name: Garrett Green
 Address: XTO Energy
 City, State ZIP: 3104 E. Greche St.
 Email: CARLSBAD, NM 88220

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

Project Name: Hat Mesa 32-2
 Project Number: 0301558249
 Project Location: 32-53001-103-088
 Sampler's Name: MARIANA O'DELL
 PO #: _____

Turn Around: Routine Rush
 Due Date: 5 days
 TAT starts the day received by the lab, if received by 4:30pm

Temp Blank: Yes No
 Thermometer ID: TMM007
 Correction Factor: -0.2
 Temperature Reading: U.2
 Corrected Temperature: U.0

Wet Ice: No Yes



890-5674 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters		Sample Comments
							Pres. Code	Preservative Codes	
FS17A	S	11/21/23	12:40	4'	C	1	Chlorides	DI Water: H ₂ O	INCIDENT #:
FS18A	S	10:20	10:20	4'	C	1		MeOH: Me	NAP2310040257
FS19A	S	12:45	12:45	4'	C	1		HCL: HC	COST CENTER:
FS16A	S	12:35	12:35	4'	C	1		HNO ₃ : HN	1148831001
SW11	S	10:30	10:30	0-4'	C	1		H ₂ SO ₄ : H ₂	API: 30-025-34819
FS04A	S	12:50	12:50	5'	C	1		NaOH: Na	Ben Belli:
								H ₃ PO ₄ : HP	bbelle@ensolum.com
								NaHSO ₄ : NABIS	
								Na ₂ S ₂ O ₃ : NaSO ₃	
								Zn Acetate+NaOH: Zn	
								NaOH+Ascorbic Acid: SACP	

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 Ti Sn U V Zn
 (Circle Method(s) and Metal(s) to be analyzed TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag 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
M. O'Dell	Ben	11/21/23			

Revised Date: 08/25/2020 Rev. 2020.2



Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5674-1

SDG Number: 03C1558249

Login Number: 5674

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	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5674-1

SDG Number: 03C1558249

Login Number: 5674

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/28/23 11:33 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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum

601 N. Marienfeld St.
Suite 400

Midland, Texas 79701

Generated 11/30/2023 2:41:39 PM

JOB DESCRIPTION

HAT MESA 32-2
03C1558249

JOB NUMBER

890-5676-1

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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11/30/2023 2:41:39 PM

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

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Client: Ensolum
Project/Site: HAT MESA 32-2

Laboratory Job ID: 890-5676-1
SDG: 03C1558249

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Definitions/Glossary

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

Job ID: 890-5676-1

Laboratory: Eurofins Carlsbad

Narrative

**Job Narrative
890-5676-1**

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/21/2023 3:16 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 4.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SW02A (890-5676-1).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-67961 and analytical batch 880-67897 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW02A (890-5676-1). 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: (LCS 880-67961/1-A). Evidence of matrix interferences is not obvious.

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-67961 and analytical batch 880-67897 recovered outside control limits for the following analytes: o-Xylene.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-67897 recovered below the upper control limit for Benzene and Toluene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-67897/51).

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-67891/20), (CCV 880-67891/31), (CCV 880-67891/47), (CCV 880-67891/5), (CCV 880-67891/58) and (LCS 880-67828/2-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

Client Sample Results

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

Client Sample ID: SW02A

Lab Sample ID: 890-5676-1

Date Collected: 11/21/23 11:55

Matrix: Solid

Date Received: 11/21/23 15:16

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		11/29/23 15:31	11/30/23 05:13	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/29/23 15:31	11/30/23 05:13	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/29/23 15:31	11/30/23 05:13	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/29/23 15:31	11/30/23 05:13	1
o-Xylene	<0.00198	U *1	0.00198	mg/Kg		11/29/23 15:31	11/30/23 05:13	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/29/23 15:31	11/30/23 05:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/29/23 15:31	11/30/23 05:13	1
1,4-Difluorobenzene (Surr)	61	S1-	70 - 130	11/29/23 15:31	11/30/23 05:13	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			11/30/23 05:13	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			11/29/23 18:59	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		11/28/23 14:43	11/29/23 18:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/28/23 14:43	11/29/23 18:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/28/23 14:43	11/29/23 18:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	11/28/23 14:43	11/29/23 18:59	1
o-Terphenyl	104		70 - 130	11/28/23 14:43	11/29/23 18:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.4		5.04	mg/Kg			11/29/23 02:19	1

Surrogate Summary

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-36142-A-1-E MS	Matrix Spike	81	99
880-36142-A-1-F MSD	Matrix Spike Duplicate	97	91
890-5676-1	SW02A	88	61 S1-
LCS 880-67961/1-A	Lab Control Sample	141 S1+	101
LCSD 880-67961/2-A	Lab Control Sample Dup	100	102
MB 880-67901/5-A	Method Blank	76	87
MB 880-67961/5-A	Method Blank	84	85

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-5668-A-11-D MS	Matrix Spike	113	113
890-5668-A-11-E MSD	Matrix Spike Duplicate	115	114
890-5676-1	SW02A	104	104
LCS 880-67828/2-A	Lab Control Sample	114	131 S1+
LCSD 880-67828/3-A	Lab Control Sample Dup	103	121
MB 880-67828/1-A	Method Blank	108	124

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-67901/5-A
Matrix: Solid
Analysis Batch: 67897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67901

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/29/23 09:09	11/29/23 11:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/29/23 09:09	11/29/23 11:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/29/23 09:09	11/29/23 11:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/29/23 09:09	11/29/23 11:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/29/23 09:09	11/29/23 11:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/29/23 09:09	11/29/23 11:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	11/29/23 09:09	11/29/23 11:06	1
1,4-Difluorobenzene (Surr)	87		70 - 130	11/29/23 09:09	11/29/23 11:06	1

Lab Sample ID: MB 880-67961/5-A
Matrix: Solid
Analysis Batch: 67897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67961

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/29/23 15:31	11/29/23 22:43	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/29/23 15:31	11/29/23 22:43	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/29/23 15:31	11/29/23 22:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/29/23 15:31	11/29/23 22:43	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/29/23 15:31	11/29/23 22:43	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/29/23 15:31	11/29/23 22:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	11/29/23 15:31	11/29/23 22:43	1
1,4-Difluorobenzene (Surr)	85		70 - 130	11/29/23 15:31	11/29/23 22:43	1

Lab Sample ID: LCS 880-67961/1-A
Matrix: Solid
Analysis Batch: 67897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 67961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07801		mg/Kg		78	70 - 130
Toluene	0.100	0.07743		mg/Kg		77	70 - 130
Ethylbenzene	0.100	0.09059		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1916		mg/Kg		96	70 - 130
o-Xylene	0.100	0.1070		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-67961/2-A
Matrix: Solid
Analysis Batch: 67897

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 67961

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07809		mg/Kg		78	70 - 130	0	35

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

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

Lab Sample ID: LCSD 880-67961/2-A
Matrix: Solid
Analysis Batch: 67897

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 67961

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Toluene	0.100	0.07054		mg/Kg		71	70 - 130	9	35
Ethylbenzene	0.100	0.07178		mg/Kg		72	70 - 130	23	35
m-Xylene & p-Xylene	0.200	0.1422		mg/Kg		71	70 - 130	30	35
o-Xylene	0.100	0.07305	*1	mg/Kg		73	70 - 130	38	35
LCSD LCSD									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		70 - 130						
1,4-Difluorobenzene (Surr)	102		70 - 130						

Lab Sample ID: 880-36142-A-1-E MS
Matrix: Solid
Analysis Batch: 67897

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 67961

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0996	0.03571	F1	mg/Kg		36	70 - 130		
Toluene	<0.00200	U F1	0.0996	0.03328	F1	mg/Kg		33	70 - 130		
Ethylbenzene	<0.00200	U F2 F1	0.0996	0.02951	F1	mg/Kg		30	70 - 130		
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.199	0.05873	F1	mg/Kg		29	70 - 130		
o-Xylene	<0.00200	U F1 *1	0.0996	0.04927	F1	mg/Kg		49	70 - 130		
MS MS											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	81		70 - 130								
1,4-Difluorobenzene (Surr)	99		70 - 130								

Lab Sample ID: 880-36142-A-1-F MSD
Matrix: Solid
Analysis Batch: 67897

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 67961

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0994	0.04932	F1	mg/Kg		50	70 - 130	32	35
Toluene	<0.00200	U F1	0.0994	0.04764	F1	mg/Kg		47	70 - 130	35	35
Ethylbenzene	<0.00200	U F2 F1	0.0994	0.04974	F2 F1	mg/Kg		50	70 - 130	51	35
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.199	0.09501	F2 F1	mg/Kg		48	70 - 130	47	35
o-Xylene	<0.00200	U F1 *1	0.0994	0.04887	F1	mg/Kg		49	70 - 130	1	35
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	97		70 - 130								
1,4-Difluorobenzene (Surr)	91		70 - 130								

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

Lab Sample ID: MB 880-67828/1-A
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67828

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		11/28/23 10:15	11/29/23 08:03	1

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

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

Lab Sample ID: MB 880-67828/1-A
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67828

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/28/23 10:15	11/29/23 08:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/28/23 10:15	11/29/23 08:03	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	108		70 - 130	11/28/23 10:15	11/29/23 08:03	1
o-Terphenyl	124		70 - 130	11/28/23 10:15	11/29/23 08:03	1

Lab Sample ID: LCS 880-67828/2-A
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 67828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	1039		mg/Kg		104	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	114		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: LCSD 880-67828/3-A
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 67828

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	918.3		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	969.7		mg/Kg		97	70 - 130	7	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	103		70 - 130
o-Terphenyl	121		70 - 130

Lab Sample ID: 890-5668-A-11-D MS
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 67828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	<50.4	U	1010	832.6		mg/Kg		79	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	113		70 - 130
o-Terphenyl	113		70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

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

Lab Sample ID: 890-5668-A-11-E MSD
Matrix: Solid
Analysis Batch: 67891

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 67828

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	<50.4	U	1010	1130		mg/Kg		107	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.4	U	1010	855.4		mg/Kg		81	70 - 130	3	20
Surrogate	%Recovery	MSD Qualifier	MSD	Limits							
1-Chlorooctane	115			70 - 130							
o-Terphenyl	114			70 - 130							

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-67792/1-A
Matrix: Solid
Analysis Batch: 67879

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/29/23 00:43	1

Lab Sample ID: LCS 880-67792/2-A
Matrix: Solid
Analysis Batch: 67879

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	243.5		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-67792/3-A
Matrix: Solid
Analysis Batch: 67879

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	247.3		mg/Kg		99	90 - 110	2	20

Lab Sample ID: 890-5676-1 MS
Matrix: Solid
Analysis Batch: 67879

Client Sample ID: SW02A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	19.4		252	267.1		mg/Kg		98	90 - 110

Lab Sample ID: 890-5676-1 MSD
Matrix: Solid
Analysis Batch: 67879

Client Sample ID: SW02A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	19.4		252	267.4		mg/Kg		98	90 - 110	0	20

Eurofins Carlsbad

QC Association Summary

Client: Ensolium
 Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
 SDG: 03C1558249

GC VOA

Analysis Batch: 67897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5676-1	SW02A	Total/NA	Solid	8021B	67961
MB 880-67901/5-A	Method Blank	Total/NA	Solid	8021B	67901
MB 880-67961/5-A	Method Blank	Total/NA	Solid	8021B	67961
LCS 880-67961/1-A	Lab Control Sample	Total/NA	Solid	8021B	67961
LCSD 880-67961/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	67961
880-36142-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	67961
880-36142-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	67961

Prep Batch: 67901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-67901/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 67961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5676-1	SW02A	Total/NA	Solid	5035	
MB 880-67961/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-67961/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-67961/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-36142-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-36142-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 68052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5676-1	SW02A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 67828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5676-1	SW02A	Total/NA	Solid	8015NM Prep	
MB 880-67828/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-67828/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-67828/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5668-A-11-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5668-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 67891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5676-1	SW02A	Total/NA	Solid	8015B NM	67828
MB 880-67828/1-A	Method Blank	Total/NA	Solid	8015B NM	67828
LCS 880-67828/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	67828
LCSD 880-67828/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	67828
890-5668-A-11-D MS	Matrix Spike	Total/NA	Solid	8015B NM	67828
890-5668-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	67828

Analysis Batch: 68037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5676-1	SW02A	Total/NA	Solid	8015 NM	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

HPLC/IC

Leach Batch: 67792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5676-1	SW02A	Soluble	Solid	DI Leach	
MB 880-67792/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-67792/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-67792/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5676-1 MS	SW02A	Soluble	Solid	DI Leach	
890-5676-1 MSD	SW02A	Soluble	Solid	DI Leach	

Analysis Batch: 67879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5676-1	SW02A	Soluble	Solid	300.0	67792
MB 880-67792/1-A	Method Blank	Soluble	Solid	300.0	67792
LCS 880-67792/2-A	Lab Control Sample	Soluble	Solid	300.0	67792
LCSD 880-67792/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	67792
890-5676-1 MS	SW02A	Soluble	Solid	300.0	67792
890-5676-1 MSD	SW02A	Soluble	Solid	300.0	67792

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Lab Chronicle

Client: Ensolum
 Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
 SDG: 03C1558249

Client Sample ID: SW02A
Date Collected: 11/21/23 11:55
Date Received: 11/21/23 15:16

Lab Sample ID: 890-5676-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	67961	11/29/23 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	67897	11/30/23 05:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			68052	11/30/23 05:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			68037	11/29/23 18:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	67828	11/28/23 14:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	67891	11/29/23 18:59	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	67792	11/27/23 17:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	67879	11/29/23 02:19	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

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	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

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Method Summary

Client: Ensolum
Project/Site: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

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: HAT MESA 32-2

Job ID: 890-5676-1
SDG: 03C1558249

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5676-1	SW02A	Solid	11/21/23 11:55	11/21/23 15:16	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) 968-3199



Work Order No:

www.xenco.com Page 1 of 1

Project Manager: Ben Belli
 Company Name: ENSOLUUM, LLC
 Address: 3122 National Parks Hwy, Carlsbad, NM 88220
 City, State ZIP: Carlsbad, NM 88220
 Phone: 989-854-0852
 Email: Garrett.Green@ExxonMobil.com

Bill to: (if different) Garrett Green
 Company Name: XTO Energy
 Address: 3104 E. Greene St, Carlsbad, NM 88220
 City, State ZIP: Carlsbad, NM 88220
 Email: Garrett.Green@ExxonMobil.com

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: Hat Mesa 32-2
 Project Number: 03C1558249
 Project Location: 32-531001-103 1988
 Sampler's Name: MARIANA O'DELL
 P.O #:
 Turn Around: Routine Rush
 Due Date: 5 days
 TAT starts the day received by the lab, if received by 4:30pm

Temp Blank: Yes No
 Thermometer ID:
 Correction Factor:
 Temperature Reading:
 Corrected Temperature:
 Wet Ice: Yes No

Preservative Codes: None: NO, DI Water: H₂O, Cool: Cool, MeOH: Me, HCL: HC, HNO₃: HN, H₂SO₄: H₂, NaHSO₄: HP, Na₂S₂O₃: NaSO₃, Zn Acetate+NaOH: Zn, NaOH+Ascorbic Acid: SAPC



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code	ANALYSIS REQUEST	Sample Comments
SW02A	S	11/21/23	11:55	0-5'	C	1	Chlorides TPH BTEX			Incident#: NAPP 23100 40257 Cost center: 1148831001 API #: 30-025-34819 Ben Belli: bbellii@ensolum.com

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
M. O'Dell	abruha	11/21/23			



Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5676-1

SDG Number: 03C1558249

Login Number: 5676

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	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5676-1

SDG Number: 03C1558249

Login Number: 5676

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/28/23 11:33 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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APPENDIX Ö

NMOCD Correspondence

From: [Buchanan, Michael, EMNRD](#)
To: [Collins, Melanie](#); spills@slo.state.nm.us; [Enviro, OCD, EMNRD](#); [Bratcher, Michael, EMNRD](#); [Hamlet, Robert, EMNRD](#); [Harimon, Jocelyn, EMNRD](#)
Cc: [Green, Garrett J](#); [DelawareSpills /SM](#); [Ben Belill](#)
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 7/10/23 - 7/14/23)
Date: Wednesday, July 5, 2023 5:28:16 PM
Attachments: [image003.png](#)

[**EXTERNAL EMAIL**]

Good afternoon,

Thank you for the notification. Please include a copy of this and all notifications in the C-141, remedial and/or closure reports to ensure the notifications are documented in the project file.

Regards,

Mike Buchanan • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE | Albuquerque, NM 87113
| michael.buchanan@emnrd.nm.gov
<http://www.emnrd.nm.gov/oed>



From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Wednesday, July 5, 2023 2:54 PM
To: spills@slo.state.nm.us; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; bbelill@ensolum.com
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 7/10/23 - 7/14/23)

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

All,

XTO plans to complete final sampling activities at the sites listed below for the week of July 10, 2023.

Tuesday July 11th

- Hat Mesa 32-2 / nAPP2316046257 (SLO)

Wednesday July 12th

- PLU 15 Twin Wells Ranch CTB / nAPP2315148242

Thursday July 13th

- PLU 102 / nAPP2315334597
- PLU 15 Twin Wells Ranch CTB / nAPP2315148242

Friday July 14th

- Nash 12 / NAB1722948770

Thank you,

Melanie Collins



Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756

From: [Rodgers, Scott, EMNRD](#)
To: [Collins, Melanie; spills@slo.state.nm.us](#); [Hamlet, Robert, EMNRD](#); [Bratcher, Michael, EMNRD](#); [Velez, Nelson, EMNRD](#)
Cc: [Green, Garrett J](#); [Ben Belill](#); [DelawareSpills /SM](#); [Lambert, Tommee L](#)
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 10/30/23 - 11/3/23)
Date: Wednesday, October 25, 2023 5:59:47 PM
Attachments: [image003.png](#)

You don't often get email from scott.rodgers@emnrd.nm.gov. [Learn why this is important](#)

[EXTERNAL EMAIL**]**

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Scott Rodgers • Environmental Specialist
 Environmental Bureau
 EMNRD - Oil Conservation Division
 8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
 505.469.1830 | scott.rodgers@emnrd.nm.gov
<http://www.emnrd.nm.gov/oed>



From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Wednesday, October 25, 2023 3:11 PM
To: spills@slo.state.nm.us; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>; bbelill@ensolum.com; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Lambert, Tommee L <tommee.l.lambert@exxonmobil.com>
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 10/30/23 - 11/3/23)

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

XTO plans to complete final sampling activities at the sites listed below for the week of October 30, 2023, between 8 a.m. and 5 p.m MST.

Thank you,

Site Name	BEU Connector PW Booster
Location	H-22-23S-30E; Eddy County, NM
Incident ID	nAPP2213151424
Source & Description of Activities	Sampling
Expected Duration for Activities	5 Days (10.30.23-11.3.23)

Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Site Name	Mobley Ranch Pipeline
Location	H-22-23S-30E; Eddy County, NM
Incident ID	nAPP2316045229
Source & Description of Activities	Sampling
Expected Duration for Activities	5 Days (10.30.23-11.3.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Site Name	Hat Mesa 32-2
Location	C-32-20S-33E; Lea County, NM
Incident ID	nAPP2316046257
Source & Description of Activities	Sampling
Expected Duration for Activities	4 Days (10.31.23-11.3.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Thank you,

Melanie Collins



Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756

From: [Wells, Shelly, EMNRD](#)
To: [Collins, Melanie; spills@slo.state.nm.us](#)
Cc: [Lambert, Tommee L](#); [Green, Garrett J](#); [Ben Bellil](#); [Velez, Nelson, EMNRD](#); [Bratcher, Michael, EMNRD](#)
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 11/20/23 - 11/23/23)
Date: Thursday, November 16, 2023 1:54:45 PM
Attachments: [image001.png](#)

[**EXTERNAL EMAIL**]

Hi Melanie,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
 Environmental Bureau
 EMNRD-Oil Conservation Division
 1220 S. St. Francis Drive | Santa Fe, NM 87505
 (505)469-7520 | Shelly.Wells@emnrd.nm.gov
<http://www.emnrd.state.nm.us/OCD/>

From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Thursday, November 16, 2023 11:37 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; spills@slo.state.nm.us
Cc: Lambert, Tommee L <tommee.l.lambert@exxonmobil.com>; Green, Garrett J <garrett.green@exxonmobil.com>; bbelill@ensolum.com
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 11/20/23 - 11/23/23)

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

All,

XTO plans to complete final sampling activities at the sites listed below for the week of November 20, 2023, between 8 a.m. and 5 p.m MST.

Thank you,

Site Name	Hat Mesa 32-2
Location	C-32-20S-33E; Lea County, NM
Incident ID	nAPP2316046257

Source & Description of Activities	Sampling
Expected Duration for Activities	2 Days (11.21.23-11.22.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Thank you,

Melanie Collins



Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756

Sante Fe Main Office
Phone: (505) 476-3441

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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

Action 533739

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2316046257
Incident Name	NAPP2316046257 HAT MESA 32 STATE 2 @ C-32-20S-33E
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	HAT MESA 32 STATE 2
Date Release Discovered	05/27/2023
Surface Owner	State

Incident Details	
<i>Please answer all the questions in this group.</i>	
Incident Type	Produced Water 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	
<i>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.</i>	
Crude Oil Released (bbls) Details	Cause: Corrosion Flow Line - Production Crude Oil Released: 2 BBL Recovered: 0 BBL Lost: 2 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion Flow Line - Production Produced Water Released: 15 BBL Recovered: 3 BBL Lost: 12 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
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, Page 2

Action 533739

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

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	<i>Not answered.</i>

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: Richard Kotzur Title: Senior Project Manager Email: NMEEnvNotifications@exxonmobil.com Date: 12/10/2025
--	--

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QUESTIONS, Page 3

Action 533739

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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 100 and 500 (ft.)
What method was used to determine the depth to ground water	OCD Imaging Records Lookup
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 1000 (ft.) and ½ (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 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (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	Yes

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
<i>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.</i>	
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)	371
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	91.5
GRO+DRO (EPA SW-846 Method 8015M)	88.9
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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	11/01/2023
On what date will (or did) the final sampling or liner inspection occur	11/21/2023
On what date will (or was) the remediation complete(d)	11/21/2023
What is the estimated surface area (in square feet) that will be reclaimed	7141
What is the estimated volume (in cubic yards) that will be reclaimed	930
What is the estimated surface area (in square feet) that will be remediated	7141
What is the estimated volume (in cubic yards) that will be remediated	930

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, Page 4

Action 533739

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
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	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No

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: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/10/2025
--	---

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, Page 5

Action 533739

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 533739

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	493844
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/13/2025
What was the (estimated) number of samples that were to be gathered	1
What was the sampling surface area in square feet	200

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	7141
What was the total volume (cubic yards) remediated	930
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	7141
What was the total volume (in cubic yards) reclaimed	930
Summarize any additional remediation activities not included by answers (above)	Excavation activities were conducted at the Site as indicated in the Work Plan to address the May 27, 2023 release of crude oil and produced water. Laboratory analytical results for all excavation soil samples collected indicate COC concentrations were compliant with the Closure Criteria. Based on soil sample laboratory analytical results, no further remediation is required. The excavation has been backfilled with material purchased locally and the Site has been recontoured to match pre-existing site conditions.
<i>The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/10/2025

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**State of New Mexico
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QUESTIONS, Page 7

Action 533739

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Reclamation Report

Only answer the questions in this group if all reclamation steps have been completed.

Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	7141
What was the total volume of replacement material (in cubic yards) for this site	930

Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	04/01/2026

Summarize any additional reclamation activities not included by answers (above)	The pasture area will be seeded during the Spring of 2026, when temperatures and precipitation are more conducive to vegetation growth. The Site will be seeded with the below SLO seed mix for sandy loam at the rate specified in pounds of pure live seed (PLS) per acre. The seed mix will be applied via drill seeding or broadcast seeding. If broadcast seeding is selected, the PLS/acre will be doubled, and the seed will be raked in by chaining or dragging the Site. The Site will be monitored for vegetation growth to ensure that reclamation activities were successful. Focus for this phase will be to prevent erosion and Site degradation, and to monitor for and treat invasive and noxious weed species.
---	---

The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/10/2025
--	---

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QUESTIONS, Page 8

Action 533739

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 533739

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 533739
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
nvez	Reclamation report approved. Pending re-vegetation report.	2/12/2026