

Location:	Hat Mesa 32-2		
Spill Date:	5/27/2023		
Area 1			
Approximate Area =	6425.00	sq. ft.	
Average Saturation (or depth) of spill =	1.00	inches	
Average Porosity Factor =	0.15		
VOLUME OF LEAK			
Total Crude Oil =	1.90	bbls	
Total Produced Water =	15.40	bbls	
TOTAL VOLUME OF LEAK			
Total Crude Oil =	1.90	bbls	
Total Produced Water =	15.40	bbls	
TOTAL VOLUME RECOVERED			
Total Crude Oil =	0.33	bbls	
Total Produced Water =	2.67	bbls	



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
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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
Grama, Blue (Hachita)	0.81
Bluestem, Little	0.67
Sand, Mesa, Giant Dropseed	0.05
Grama, 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.

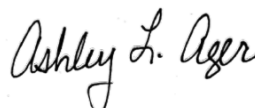
Excavation of soil has mitigated impacts exceeding the Closure Criteria at the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2316046257.

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

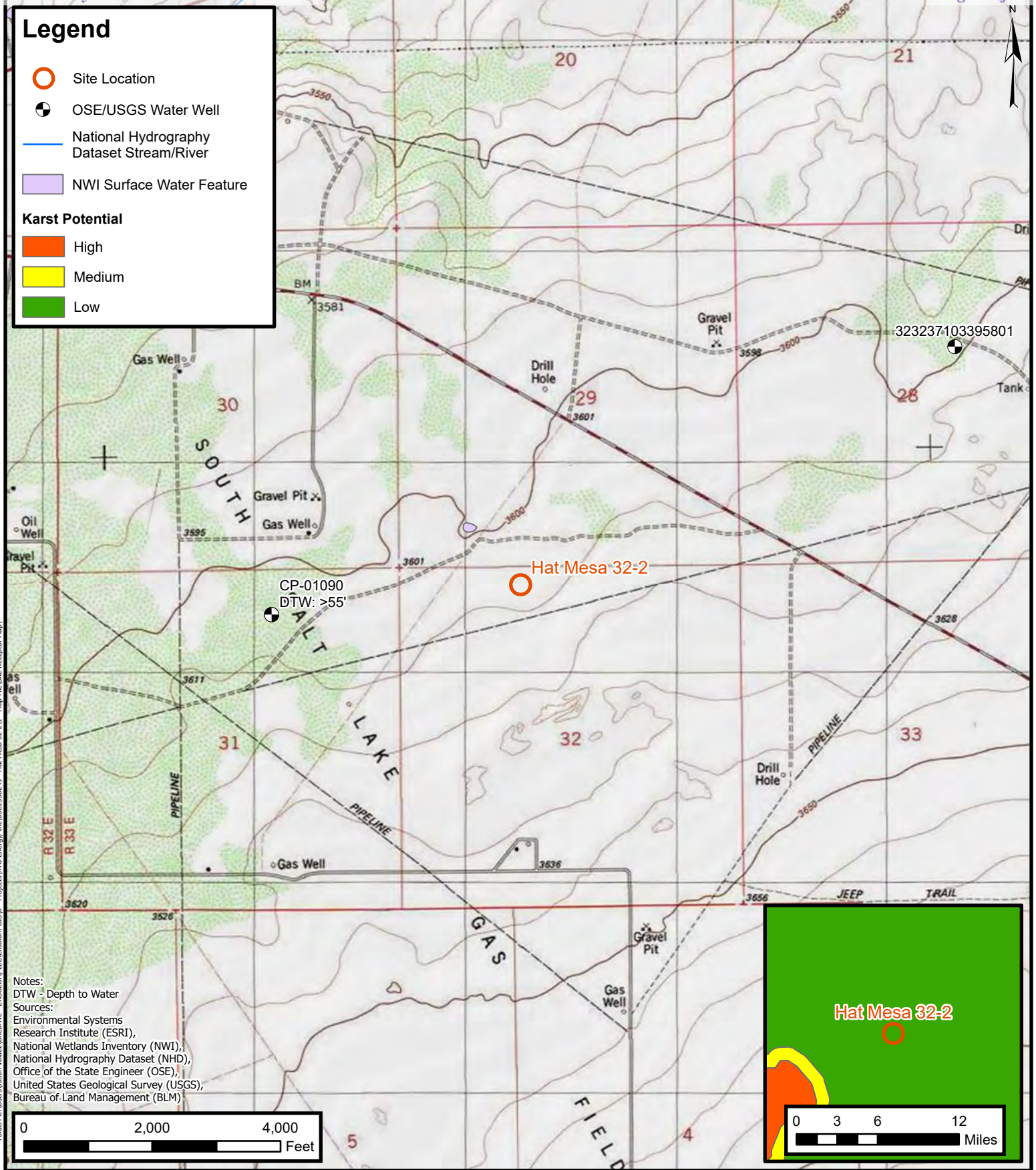
cc: Amy Ruth, XTO
Amanda Garcia, XTO
NMSLO

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



FIGURES



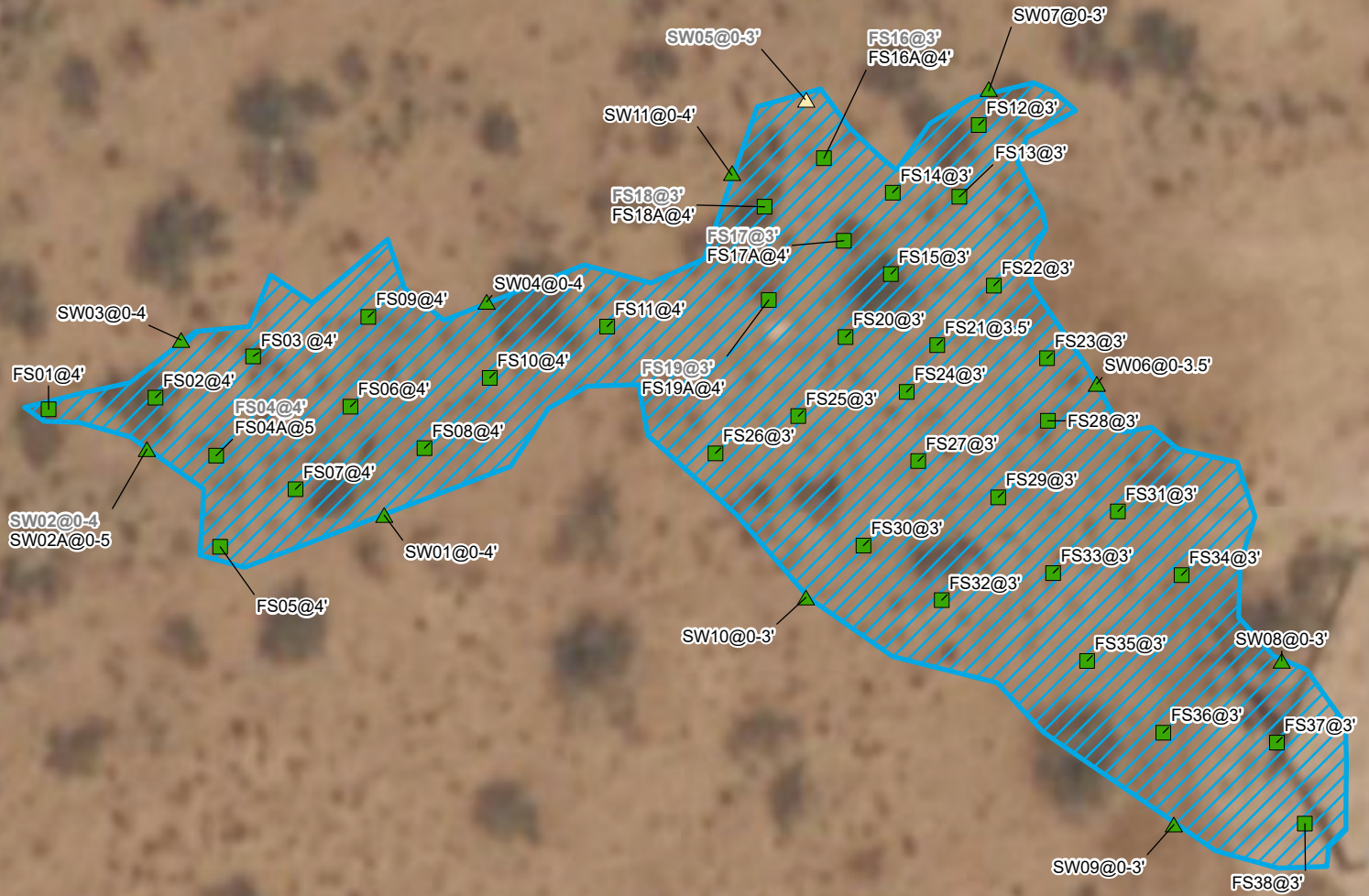
ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants

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

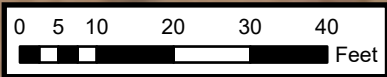
FIGURE
1

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 County, New Mexico

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)
NMOCD 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	<0.0096	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



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 to 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

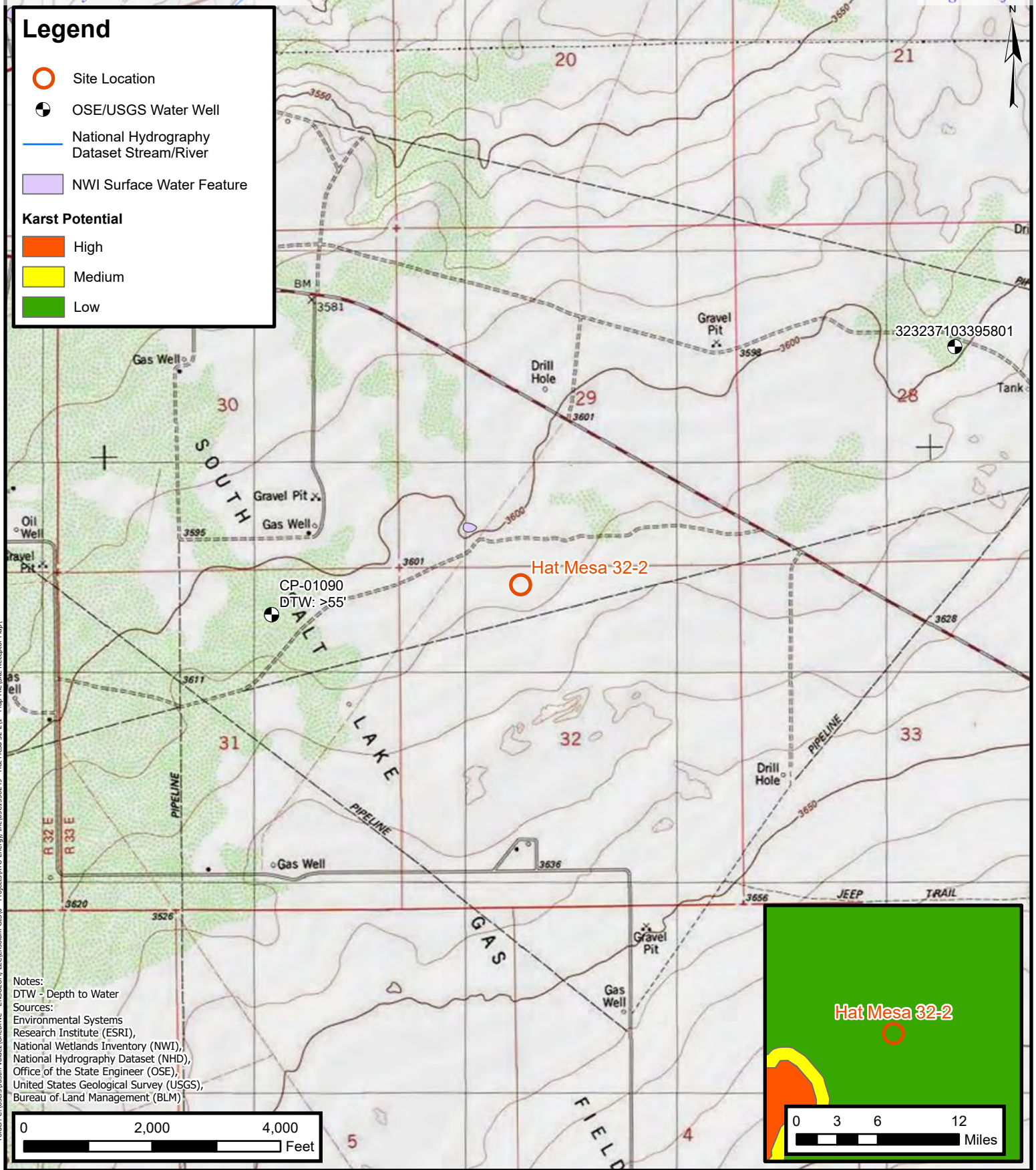
cc: Garrett Green, XTO
Tommee Lambert, XTO
NMSLO - ECO

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



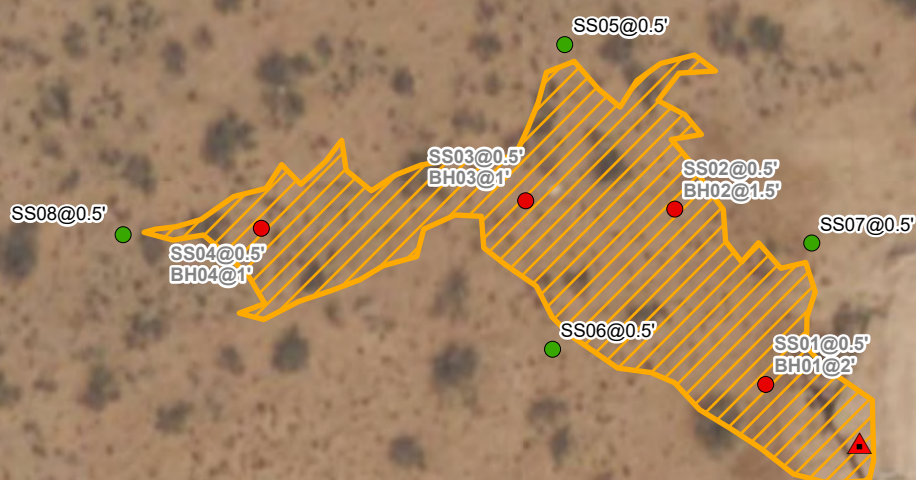
ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants

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

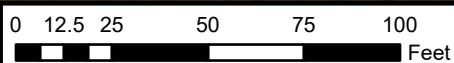
Legend

- 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)



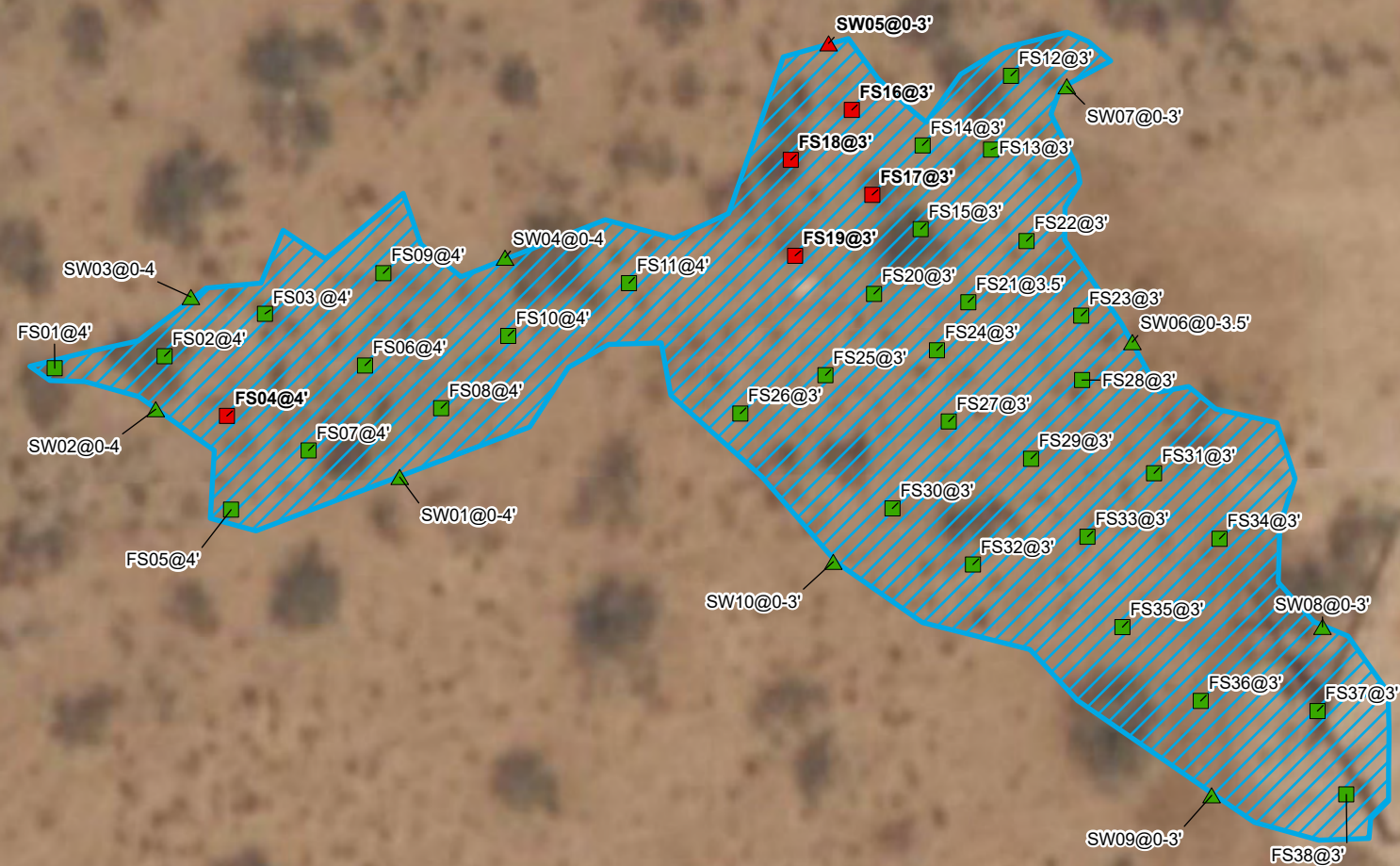
Delineation Soil Sample Locations

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.

0 5 10 20 30 40
 Feet

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)
NMOCD 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
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)
NMOCD 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

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



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:

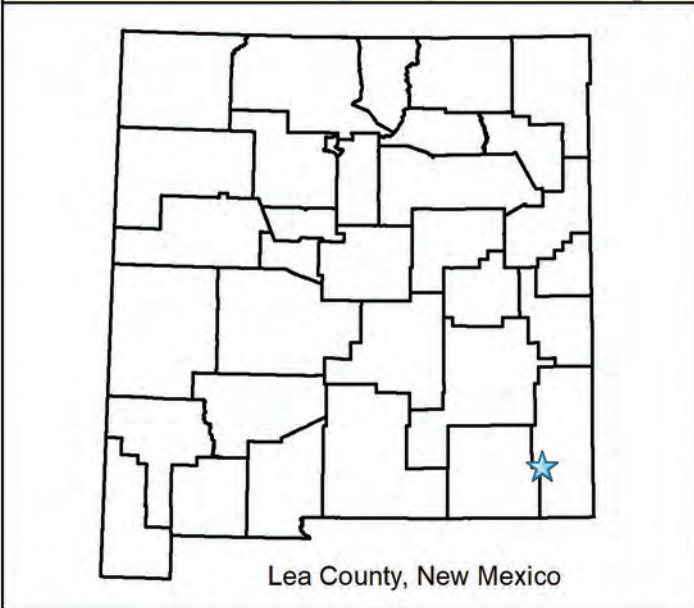
No person may alter the wording of the questions or layout of the cover sheet. The completion of this cover sheet by itself does not authorize anyone to engage in new surface disturbing activity before the review and approvals required by the Cultural Properties Protections Rule.

Form Revised 12 22



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

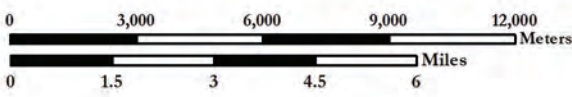


Lea County, New Mexico



Legend

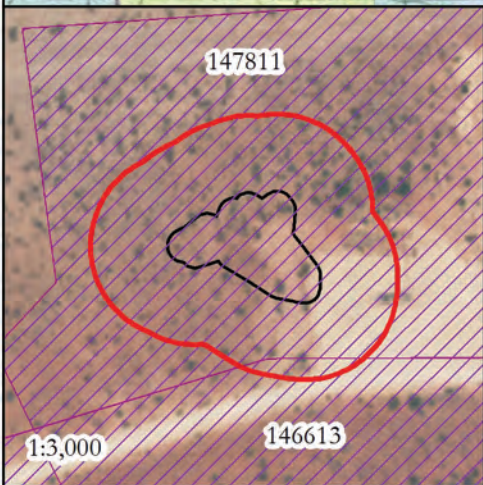
★ Project Location



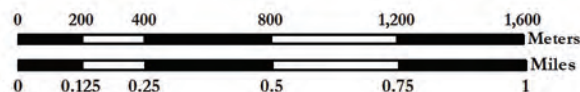
Base Map: USGS 7.5'
Scale: 1:180,000
UTM NAD83 Zone 13



Lea County, New Mexico



 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

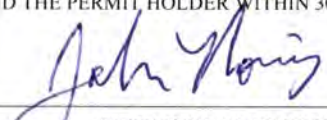
www.ose.state.nm.us

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: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) NA	DATE STATIC MEASURED	
	DRILLING FLUID: ☒ AIR ☐ MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:					CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐	
	DEPTH (feet bgl) FROM TO		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)
				No Casing			
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	0 55		6	Bentonite grout	10.8	tremie	

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

	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				
4. HYDROGEOLOGIC LOG OF WELL	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	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ☐ PUMP ☐ AIR LIFT ☐ BAILER ☒ 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. <i>USE ON AUG 2 2022 mjl/jd2</i>					
	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:  John Norris SIGNATURE OF DRILLER / PRINT SIGNEE NAME					7/25/2022 DATE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO.	CP-01090	POD NO.	1
LOCATION		TRN NO.	602836
205 33E-31-1-1-2		WELL TAG ID NO	PAGE 2 OF 2



APPENDIX C

Lithologic Soil Sampling Logs

 ENSOLUM		Sample Name: BH01		Date: 7/14/2023				
		Site Name: Hat Mesa 32-2						
		Incident Number: nAPP2316046257						
		Job Number: 03C1558249						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.536036, -103.688066			Logged By: Mariaha O'Dell		Method: Hand Auger			
			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		
Total Depth @ 2 feet bgs (auger refusal).								

 ENSOLUM		Sample Name: BH02		Date: 7/14/2023				
		Site Name: Hat Mesa 32-2						
		Incident Number: nAPP2316046257						
		Job Number: 03C1558249						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.536162, -103.688143			Logged By: Mariaha O'Dell		Method: Hand Auger			
			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, -103.687997, +16.00ft
 Altitude: 3614.9ft
 Datum: NAD83
 Azimuth/Bearing: 332° NDBE 1067mils True (±14°)
 Elevation Angle: -43.8°
 Horizon Angle: -0.6°
 Zoom: 1.0X
 Hat Mesa 32 - 2 release looking northwest



Photograph 1

Date: 6/19/2023

Description: Site assessment activities, release extent

View: Northwest

Date & Time: Fri, Jul 14, 2023 at 10:16:25 MDT
 Position: +32.536154, -103.688315, +2270.00ft
 Altitude: 3609ft
 Datum: NAD83
 Azimuth/Bearing: 090° NDBE 1067mils True (±1°)
 Elevation Angle: -21.3°
 Horizon Angle: -0.1°
 Zoom: 1.0X
 CH3401 - 065
 Mariana O'Call



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



Photograph 3

Date: 11/3/2023

Description: Excavation extent

View: East

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



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

See page two for job notes and contact information.
Released to Imaging: 6/10/2024 5:42:41 PM



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

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.
▫	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

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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
Date Collected: 06/19/23 10:10
Date Received: 06/19/23 15:52
Sample Depth: 0.5

Lab Sample ID: 890-4836-8
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		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	
OII 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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(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 Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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 %Recovery	MS Qualifier	Limits
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 Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	0.05300	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 %Recovery	MSD Qualifier	Limits
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 Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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 %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
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 Result	MB 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 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	LCS	Unit	D	%Rec	%Rec Limits	
		Result	Qualifier					
Gasoline Range Organics (GRO)-C6-C10	1000	913.2		mg/Kg		91	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	879.9		mg/Kg		88	70 - 130	
Surrogate		LCS	LCS			%Recovery	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	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
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			%Recovery	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	MS	Unit	D	%Rec	%Rec Limits	
	Result	Qualifier		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		%Recovery	Qualifier			Limits		
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	MSD %Recovery	MSD Qualifier	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	
LCSD 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
LCSD 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
Date Collected: 06/19/23 09:25
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-1
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	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
Date Collected: 06/19/23 09:30
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	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
Date Collected: 06/19/23 09:35
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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
Date Collected: 06/19/23 09:40
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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

Eurofins Carlsbad

Lab Chronicle

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

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

Client Sample ID: SS07
Date Collected: 06/19/23 10:05
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 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
Date Collected: 06/19/23 10:10
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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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- 13
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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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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4836-1

SDG Number: 03C1558249

Login Number: 4836

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	

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	



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

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

Case Narrative

Client: Ensolum
Project/Site: 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.

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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: 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
Date Collected: 07/14/23 10:00
Date Received: 07/14/23 13:00
Sample Depth: 1.5

Lab Sample ID: 890-4946-2
Matrix: Solid

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
Date Collected: 07/14/23 10:10
Date Received: 07/14/23 13:00
Sample Depth: 1

Lab Sample ID: 890-4946-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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
Date Collected: 07/14/23 10:20
Date Received: 07/14/23 13:00
Sample Depth: 1

Lab Sample ID: 890-4946-4
Matrix: Solid

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	

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	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
LCSD 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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	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
LCSD 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 MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
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 MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
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 LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
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 LCS		Limits
	%Recovery	Qualifier	
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 LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					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 LCSD		Limits
	%Recovery	Qualifier	
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 Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
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 Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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 %Recovery	MS 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 Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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 %Recovery	MSD 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 Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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
Oil 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 %Recovery	MB 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 Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
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

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
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 Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
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 Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
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 Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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

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

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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	
LCSD 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
LCSD 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	
LCSD 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

Lab Chronicle

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

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

Client Sample ID: BH01

Date Collected: 07/14/23 09:30

Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-1

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			5.04 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

Date Collected: 07/14/23 10:00

Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	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

Date Collected: 07/14/23 10:10

Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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

Date Collected: 07/14/23 10:20

Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	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

Date Collected: 07/14/23 10:20

Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

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 Belill	Bill to: (if different)	Garrett Green
Company Name:	ENSOLUM, LLC	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	Garrett.Green@ExxonMobil.com

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

Project Name:	Hat Mesa 32-2		Turn Around	ANALYSIS REQUEST										Preservative Codes					
Project Number:	03C1558249		☒ Routine ☐ Rush	Pres. Code													None: NO	DI Water: H ₂ O	
Project Location:	32.53001 - 103.08800		Due Date:	5 days		 890-4946 Chain of Custody										Cool: Cool	MeOH: Me		
Sampler's Name:	Mariaha O'Dell		TAT starts the day received by the lab, if received by 4:30pm		HCL: HC											HNO ₃ : HN			
PO #:					H ₂ SO ₄ : H ₂											NaOH: Na			
SAMPLE RECEIPT				Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No	Parameters Chlorides TPH BTEX										H ₃ PO ₄ : HP	
Samples Received Intact:	☒ Yes ☐ No	Thermometer ID:	TMM007		NaHSO ₄ : NABIS														
Cooler Custody Seals:	☒ Yes ☐ No	Correction Factor:	-0.0		Na ₂ S ₂ O ₃ : NaSO ₃														
Sample Custody Seals:	☒ Yes ☐ No	Temperature Reading:	20.2		Zn Acetate+NaOH: Zn														
Total Containers:		Corrected Temperature:	20.0		NaOH+Ascorbic Acid: SAPC														

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides	TPH	BTEX	Sample Comments
BH01	S	7/14/23	9:30	2'	G	1	X	X	X	Incident #:
BH02	S		10:00	15'	G	1				nAPP 2316040257
BH03	S		10:10	1'	G	1				Cost Center:
BH04	S		10:20	1'	G	1				1148831001
										Ben Belill:
										bbelill@ensolum.com
										API:
										30-015-34819

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>M. O'Dell</i>	<i>Clue</i>	7.14.23 1300			
3					
5					

Revised Date: 08/25/2020 Rev. 2020.2

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	

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	



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
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 12:38:26 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: 890-5563-1

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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

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
Date Collected: 11/01/23 09:20
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-1
Matrix: Solid

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
Date Collected: 11/01/23 09:25
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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
Oil 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
Date Collected: 11/01/23 09:45
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-6
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00201	U	0.00201	mg/Kg		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
Date Collected: 11/01/23 09:50
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-7
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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	
Oil 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
Date Collected: 11/02/23 11:30
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-13
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.3	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
Date Collected: 11/02/23 11:35
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-14
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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
Oil 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
Date Collected: 11/02/23 12:25
Date Received: 11/03/23 08:35
Sample Depth: 3

Lab Sample ID: 890-5563-16
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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
Date Collected: 11/02/23 12:30
Date Received: 11/03/23 08:35
Sample Depth: 3

Lab Sample ID: 890-5563-17
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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
Date Collected: 11/02/23 12:30
Date Received: 11/03/23 08:35
Sample Depth: 3

Lab Sample ID: 890-5563-17
Matrix: Solid

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
Date Collected: 11/02/23 12:35
Date Received: 11/03/23 08:35
Sample Depth: 3

Lab Sample ID: 890-5563-18
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00201	U	0.00201	mg/Kg		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
Date Collected: 11/02/23 12:40
Date Received: 11/03/23 08:35
Sample Depth: 3

Lab Sample ID: 890-5563-19
Matrix: Solid

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
Date Collected: 11/02/23 12:45
Date Received: 11/03/23 08:35
Sample Depth: 3

Lab Sample ID: 890-5563-20
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00199	U	0.00199	mg/Kg		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	
Oil 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
Date Collected: 11/02/23 12:50
Date Received: 11/03/23 08:35
Sample Depth: 3

Lab Sample ID: 890-5563-21
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00198	U	0.00198	mg/Kg		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
Date Collected: 11/02/23 12:55
Date Received: 11/03/23 08:35
Sample Depth: 3

Lab Sample ID: 890-5563-22
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00199	U	0.00199	mg/Kg		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
Date Collected: 11/02/23 14:00
Date Received: 11/03/23 08:35
Sample Depth: 0-3

Lab Sample ID: 890-5563-24
Matrix: Solid

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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(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

Job ID: 890-5563-1

Project/Site: Hat Mesa 32-2

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-5563-4	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

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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)

Lab Sample ID: MB 880-66261/5-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 66350						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						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 66350						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					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 66350					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	LCS	Limits						
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	125		70 - 130						
1,4-Difluorobenzene (Surr)	120		70 - 130						

Lab Sample ID: LCSD 880-66320/2-A						Client Sample ID: Lab Control Sample Dup				
Matrix: Solid						Prep Type: Total/NA				
Analysis Batch: 66350						Prep Batch: 66320				
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	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		LCSD	LCSD	Unit	D	%Rec	%Rec		RPD
	Added	Result	Qualifier	Limit				Limits	RPD	
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
LCSD		LCSD								
Surrogate	%Recovery	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		Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier		Result	Qualifier				Limits	RPD
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	
MS		MS								
Surrogate	%Recovery	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		Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD
	Result	Qualifier		Result	Qualifier				Limits	RPD	
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
MSD		MSD									
Surrogate	%Recovery	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		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
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	MB	MB	Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
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	MB	MB	Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
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 Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
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 Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
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 Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
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 Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	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

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
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 Result	MB 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 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

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
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				Client Sample ID: Lab Control Sample						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66344				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				Client Sample ID: Lab Control Sample Dup						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66344				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				Client Sample ID: Matrix Spike						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66344				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				Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66344				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

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<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							
	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 16:30	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	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
1-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	LCS	LCS					%Rec	
	Added	Result	Qualifier	Unit	D	%Rec	Limits		
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		%Recovery	Qualifier	Limits					
1-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	LCSD	LCSD					%Rec		RPD	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	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		%Recovery	Qualifier	Limits							
1-Chlorooctane		98		70 - 130							
<i>o</i> -Terphenyl		118		70 - 130							

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

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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		
Surrogate	MS %Recovery	MS 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

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.5	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
Surrogate	MSD %Recovery	MSD 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	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	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				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

				Spike	LCS D	LCS D				%Rec	RPD	
Analyte				Added	Result	Qualifier	Unit	D	%Rec	Limits	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

Client Sample ID: FS17

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 66512

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

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
Date Collected: 11/01/23 09:20
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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
Date Collected: 11/01/23 09:25
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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
Date Collected: 11/01/23 09:30
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 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
Date Collected: 11/01/23 09:35
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 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

Date Collected: 11/01/23 09:35

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

Date Collected: 11/01/23 09:40

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 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

Date Collected: 11/01/23 09:45

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

Date Collected: 11/01/23 09:50

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-5563-1

Client Sample ID: FS07
Date Collected: 11/01/23 09:50
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 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
Date Collected: 11/01/23 09:55
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 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
Date Collected: 11/01/23 10:20
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
Date Collected: 11/01/23 10:30
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

Date Collected: 11/01/23 10:40

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Date Collected: 11/01/23 10:50

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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

Date Collected: 11/02/23 11:30

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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

Date Collected: 11/02/23 11:35

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	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

Date Collected: 11/02/23 11:35

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

Date Collected: 11/02/23 11:40

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

Date Collected: 11/02/23 12:25

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 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

Date Collected: 11/02/23 12:30

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/02/23 12:30
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 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
Date Collected: 11/02/23 12:35
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	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
Date Collected: 11/02/23 12:40
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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
Date Collected: 11/02/23 12:45
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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

Date Collected: 11/02/23 12:50

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-21

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	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

Date Collected: 11/02/23 12:55

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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

Date Collected: 11/02/23 13:00

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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

Date Collected: 11/02/23 14:00

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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

Date Collected: 11/02/23 14:00

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

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



Environment Testing
Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 3

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

Project Name:		Turn Around		ANALYSIS REQUEST												Preservative Codes				
Project Number:	03C1558249	☒ Routine ☐ Rush		Pres. Code													None: NO	DI Water: H ₂ O		
Project Location:		Due Date:		Parameters	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)		890-5563 Chain of Custody								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 RECEIPT		Temp Blank:	☒ Yes ☐ No														Wet Ice:	☒ Yes ☐ No	H ₃ PO ₄ : HP	
Samples Received Intact:	☒ Yes ☐ No	Thermometer ID:	111111														NaHSO ₄ : NABIS			
Cooler Custody Seals:	Yes ☐ No ☒ N/A	Correction Factor:	-0.2	Na ₂ S ₂ O ₃ : NaSO ₃																
Sample Custody Seals:	Yes ☐ No ☒ N/A	Temperature Reading:	1.4	Zn Acetate+NaOH: Zn																
Total Containers:		Corrected Temperature:	8.2	NaOH+Ascorbic Acid: SAPC																
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)								Sample Comments			
FS01	S	11/1/23	920	4	C	1	/	/	/								Incident ID:			
FS02			925			1	/	/	/								nAPP2316046257			
FS03			930			1	/	/	/											
FS04			935			1	/	/	/								Cost Center:			
FS05			940			1	/	/	/								1148831001			
FS06			945			1	/	/	/								AFE:			
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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		15:28 11/1/23			
3					
5					

Revised Date: 08/25/2020 Rev. 2020.2

Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 246-4200, 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 Belill	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 ☐ 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		Turn Around		ANALYSIS REQUEST												Preservative Codes							
Project Number:		03C1558249		☒ Routine ☐ Rush		Pres. Code														None: NO DI Water: H ₂ O					
Project Location:				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 RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No		Parameters														H ₃ PO ₄ : HP	
Samples Received Intact:		Yes No		Thermometer ID:						CHLORIDES (EPA: 3000.0)														NaHSO ₄ : NABIS	
Cooler Custody Seals:		Yes No N/A		Correction Factor:						TPH (8015)														Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:		Yes No N/A		Temperature Reading:						BTX (8021)														Zn Acetate+NaOH: Zn	
Total Containers:				Corrected Temperature:																				NaOH+Ascorbic Acid: SAPC	
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont													Sample Comments					
SW03		S	11/1/23	1040	0-4	C	1													Incident ID:					
SW04			↓	1050	0-4	C	1													nAPP2316046257					
FS09			11/2/23	1130	4		1																		
FS10				1135	4		1													Cost Center:					
FS11				1140	4		1													1148831001					
FS12				1225	3		1													AFE:					
FS13				1230			1																		
FS14				1235			1																		
FS15				1240			1																		
FS16		↓	↓	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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Garrett</i>	<i>alred</i>	15:28 11/2			
3					
5					

Revised Date: 08/25/2020 Rev 2020.2



Environment Testing
Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 7 of 7

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

[illegible]

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:	8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U				Hg:	1631 / 245.1 / 7470 / 7471						

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

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	<i>C. L. L. L.</i>	<i>C. L. L. L.</i>		15.28 11/13			
3					4		
5					6		

Revised Date: 08/25/2020 Rev. 2020.2

Age Group	Number of People
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14

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	

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	



Environment Testing

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

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.
▫	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

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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: 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
Date Collected: 11/03/23 09:25
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-5
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<0.00201	U	0.00201	mg/Kg		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
Date Collected: 11/03/23 09:30
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-6
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<0.00200	U	0.00200	mg/Kg		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	

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
Date Collected: 11/03/23 09:15
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-7
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
OII 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
Date Collected: 11/03/23 09:20
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-8
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00198	U	0.00198	mg/Kg		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	
OII 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
Date Collected: 11/03/23 11:45
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-11
Matrix: Solid

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
Date Collected: 11/03/23 11:10
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-12
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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: Ensolum
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

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: 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
Date Collected: 11/03/23 13:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-23
Matrix: Solid

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
Date Collected: 11/03/23 14:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-24
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB1	DFBZ1						
		(70-130)	(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						
LCSD 880-66433/2-A	Lab Control Sample Dup	117	110						
LCSD 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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(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

Job ID: 890-5567-1

Project/Site: Hat Mesa 32-2

SDG: 32.53601,-103,688

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-5567-3 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			

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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)

Lab Sample ID: MB 880-66374/5-A						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66684						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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66683						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						Client Sample ID: Lab Control Sample		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66683						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						Client Sample ID: Lab Control Sample Dup		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66683						Prep Batch: 66433		
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	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

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
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	

Surrogate	MS		Limits
	%Recovery	Qualifier	
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

Surrogate	MSD		Limits
	%Recovery	Qualifier	
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		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
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	LCS	LCS	Unit	D	%Rec			
			Added	Result	Qualifier			%Rec			
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		

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	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
			Added	Result	Qualifier				Limits		Limit
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
						</					

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

	MS	MS	
Surrogate	%Recovery	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
	MSD	MSD									
Surrogate	%Recovery	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
	MB	MB						
Surrogate	%Recovery	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		Dil Fac
	%Recovery	Qualifier			Analyzed	
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	
		Result	Qualifier				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 LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits			
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 Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec	
	Result	Qualifier		Result	Qualifier				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

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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: 890-5568-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	MSD %Recovery	MSD 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	MB %Recovery	MB 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	LCS %Recovery	LCS 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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
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

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
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	%Recovery	Qualifier	Limits							
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

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.6	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	%Recovery	Qualifier	Limits									
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

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		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	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
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				Client Sample ID: Lab Control Sample						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66475				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 %Recovery	LCS Qualifier	Limits						
Surrogate										
1-Chlorooctane		80		70 - 130						
o-Terphenyl		91		70 - 130						

Lab Sample ID: LCSD 880-66454/3-A				Client Sample ID: Lab Control Sample Dup						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66475				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 %Recovery	LCSD Qualifier	Limits						
Surrogate										
1-Chlorooctane		78		70 - 130						
o-Terphenyl		88		70 - 130						

Lab Sample ID: 890-5567-23 MS				Client Sample ID: FS37						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66475				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 %Recovery	MS Qualifier	Limits						
Surrogate										
1-Chlorooctane		168	S1+	70 - 130						
o-Terphenyl		162	S1+	70 - 130						

Lab Sample ID: 890-5567-23 MSD				Client Sample ID: FS37						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66475				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 %Recovery	MSD Qualifier	Limits						
Surrogate										
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				Client Sample ID: FS37			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 66475				Prep Batch: 66454			
	MSD	MSD					
Surrogate	%Recovery	Qualifier	Limits				
o-Terphenyl	140	S1+	70 - 130				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66337/1-A						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Soluble		
Analysis Batch: 66518								
	MB	MB						
Analyte	Result	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					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Soluble				
Analysis Batch: 66518									
			Spike	LCS	LCS			%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride			250	257.8		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-66337/3-A					Client Sample ID: Lab Control Sample Dup					
Matrix: Solid					Prep Type: Soluble					
Analysis Batch: 66518										
			Spike	LCSD	LCSD			%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD
Chloride			250	258.1		mg/Kg		103	90 - 110	0

Lab Sample ID: 890-5564-A-22-C MS							Client Sample ID: Matrix Spike			
Matrix: Solid							Prep Type: Soluble			
Analysis Batch: 66518										
	Sample	Sample	Spike	MS	MS					
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	%Rec	
Chloride	399	F1	249	596.4	F1	mg/Kg	-	79	90 - 110	

Lab Sample ID: 890-5564-A-22-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 66518

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	399	F1	249	592.2	F1	mg/Kg		78	90 - 110	1	20

Lab Sample ID: MB 880-66339/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 66519

	MB	MB						
Analyte	Result	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							Client Sample ID: FS33					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 66529												
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	

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

Eurofins Carlsbad

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

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	

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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	
LCSD 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	
LCSD 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
LCSD 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

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

Date Collected: 11/03/23 08:45

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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

Date Collected: 11/03/23 08:50

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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

Date Collected: 11/03/23 08:55

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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

Date Collected: 11/03/23 09:00

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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
Date Collected: 11/03/23 09:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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
Date Collected: 11/03/23 09:25
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/03/23 09:30
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/03/23 09:15
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/03/23 09:15
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	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
Date Collected: 11/03/23 09:20
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 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
Date Collected: 11/03/23 10:55
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
Date Collected: 11/03/23 11:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/03/23 11:45
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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
Date Collected: 11/03/23 11:10
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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
Date Collected: 11/03/23 11:15
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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
Date Collected: 11/03/23 11:20
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	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

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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: FS33

Date Collected: 11/03/23 11:20

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

Date Collected: 11/03/23 11:50

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 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

Date Collected: 11/03/23 11:30

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 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

Date Collected: 11/03/23 12:35

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

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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: FS36
Date Collected: 11/03/23 12:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 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
Date Collected: 11/03/23 10:10
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-18
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	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
Date Collected: 11/03/23 11:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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
Date Collected: 11/03/23 13:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

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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: SW09
Date Collected: 11/03/23 11:40
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
Date Collected: 11/03/23 13:30
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	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
Date Collected: 11/03/23 13:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-23
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	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
Date Collected: 11/03/23 14:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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
Date Collected: 11/03/23 14:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

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

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



Environment Testing
Xenco

Chain of Custody

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

Work Order No:

www.xenco.com Page 1 of 3

Project Manager:	Ben Bell	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, 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:	bbell@ensolum.com

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

Project Name:		HAT MESA 32-2		Turn Around		ANALYSIS REQUEST										Preservative Codes						
Project Number:		03C155B249		☒ Routine ☐ Rush												None: NO DI Water: H ₂ O						
Project Location:		32.53601, -103.688		Due Date:												Cool: Cool MeOH: Me						
Sampler's Name:		Meredith Roberts		TAT starts the day received by the lab, if received by 4:30pm												HCL: HC HNO ₃ : HN						
P.O. #:																H ₂ SO ₄ : H ₂ NaOH: Na						
SAMPLE RECEIPT		Temp Blank: ☒ No ☐ Yes		Wet Ice: ☒ No ☐ Yes												H ₃ PO ₄ : HP						
Samples Received Intact:		☒ Yes ☐ No		Thermometer ID:												NaHSO ₄ : NABIS						
Cooler Custody Seals:		Yes ☐ No ☒ N/A		Correction Factor:												Na ₂ S ₂ O ₃ : NaSO ₃						
Sample Custody Seals:		Yes ☐ No ☒ N/A		Temperature Reading:												Zn Acetate+NaOH: Zn						
Total Containers:				Corrected Temperature:												NaOH+Ascorbic Acid: SAPC						
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont											Sample Comments				
FS20		S	11/3/23	0845	3'	C	1	BTEX	Chlorides	TPH											Incident #:	
FS21				0850	3.5'																oAPP2316046257	
FS22				0855	3'																	
FS23				0900																	Cost Center:	
FS24				0925																	1148831001	
FS25				0930																		
FS26				0915																	mroberts@ensolum.com	
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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Phoebe</i>	<i>Alvin</i>	14:49 10/3			

Revised Date: 08/25/2020 Rev. 2020.2



Environment Testing

Xenco

Chain of Custody

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

Work Order No:

www.xenco.com Page 2 of 3

Work Order Comments

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

Project Manager:	Ben Beull	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, 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:	bbeull@ensolum.com

Project Name:		HAT MESA 32-2		Turn Around		ANALYSIS REQUEST										Preservative Codes									
Project Number:		03C1558249		☒ Routine ☐ Rush		Pres. Code												None: NO DI Water: H ₂ O							
Project Location:		32-53601-103.688		Due Date:														Cool: Cool MeOH: Me							
Sampler's Name:		Meredith Roberts		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC HNO ₃ : HN							
PO #:																		H ₂ SO ₄ : H ₂ NaOH: Na							
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No												H ₃ PO ₄ : HP					
Samples Received Intact:		Yes No		Thermometer ID:														NaHSO ₄ : NABIS							
Cooler Custody Seals:		Yes No N/A		Correction Factor:														Na ₂ S ₂ O ₃ : NaSO ₃							
Sample Custody Seals:		Yes No N/A		Temperature Reading:														Zn Acetate+NaOH: Zn							
Total Containers:				Corrected Temperature:														NaOH+Ascorbic Acid: SAPC							
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Grab/Comp		# of Cont												Sample Comments	
FS30		S		11/3/23		3'		1145		C		1												Cost Center:	
FS31		S						1110																1148831001	
FS32		S						1115																	
FS33		S						1120																Incident #:	
FS34		S						1150																APP2316046257	
FS35		S						1130																	
FS36		S						1235																mroberts@ensolum.com	
SW06		S				0-3.5'		1000																	
SW07		S				0-3'		1010																	
SW08		S				0-3'		1135																	

Total 200.7/6010	200.8/6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP/SPLP 6010 : 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Meredith Roberts</i>	<i>Garrett Green</i>	11/4/23 10:32			
3					
5					

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

Work Order No:

www.xenco.com Page 3 of 3

Project Manager:	Ben Bellill	Bill to: (if different)	Garrett Green
Company Name:	Ensoium, 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:	bbellill@ensoium.com

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

Project Name:		HAT MESA 32-2		Turn Around		ANALYSIS REQUEST										Preservative Codes						
Project Number:		03C1558249		☒ Routine ☐ Rush		Pres. Code												None: NO DI Water: H ₂ O				
Project Location:		32-53601, -103-688		Due Date:														Cool: Cool MeOH: Me				
Sampler's Name:		Meredith Roberts		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC HNO ₃ : HN				
PO #:																		H ₂ SO ₄ : H ₂ NaOH: Na				
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No		Parameters BTEX Chlorides TPH										H ₃ PO ₄ : HP		
Samples Received Intact:		Yes No		Thermometer ID:																NaHSO ₄ : NABIS		
Cooler Custody Seals:		Yes No N/A		Correction Factor:																Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals:		Yes No N/A		Temperature Reading:																Zn Acetate+NaOH: Zn		
Total Containers:				Corrected Temperature:																NaOH+Ascorbic Acid: SAPC		
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	BTEX	Chlorides	TPH											Sample Comments	
SW09		S	11/3/23	1300	0-3'	C	1	X	X	X											Incident #:	
SW10		↓	↓	1140	0-3'	↓	↓	↓	↓	↓											NAPP2316046257	
FS37		↓	↓	1330	3'	↓	↓	↓	↓	↓												
FS38		↓	↓	1335	3'	↓	↓	↓	↓	↓											Cost Center:	
																					1148831001	
																					mroberts@ensolun.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 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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Meares</i>	<i>abraham</i>	14:49 10/8			
3					
5			5		

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 Source: Eurofins Carlsbad

List Number: 1

Creator: Lopez, Abraham

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5567-1
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	



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/oecd>



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

Date & Time: Fri, Jun 19, 2023 at 09:06:37 MDT
 Position: +392536.84° / -103.687997° (-103.688)
 Altitude: 3609.0ft (+156.0ft)
 Datum: WGS84
 Azimuth/Bearing: 332° NBS - 1067mils True (+141°)
 Elevation Angle: -61.3°
 Horizontal Angle: -61.3°
 Zoom: 1.0X
 Hat Mesa 32 - 2 release looking northwest



Photograph 1

Date: 6/19/2023

Description: Site assessment activities, release extent

View: Northwest

Date & Time: Fri, Jul 14, 2023 at 10:18:25 MDT
 Position: +392536.84° / -103.687997° (-103.688)
 Altitude: 3609.0ft (+156.0ft)
 Datum: WGS84
 Azimuth/Bearing: 090° NBS - 1067mils True (+141°)
 Elevation Angle: -61.3°
 Horizontal Angle: -61.3°
 Zoom: 1.0X
 CH3000-000
 Mariana D. Ochoa



Photograph 2

Date: 7/14/2023

Description: Delineation activities, BH04

View: East

Date & Time: Thu, Nov 02, 2023 at 14:58:17 MDT
 Position: +392536.84° / -103.687997° (-103.688)
 Altitude: 3609.0ft (+156.0ft)
 Datum: WGS84
 Azimuth/Bearing: 225° NBS - 1067mils True (+141°)
 Elevation Angle: -61.3°
 Horizontal Angle: -61.3°
 Zoom: 1.0X
 Hat Mesa 32 - 2 excavation



Photograph 3

Date: 11/2/2023

Description: Excavation extent

View: Southwest

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



Photograph 4

Date: 11/3/2023

Description: Excavation extent

View: Southwest



Photographic Log

XTO Energy, Inc

Hat Mesa 32 - 2

Incident Number nAPP2316046257

Date & Time: Tue, Nov 21, 2023 at 14:06:11 MST
 Position: -032.534717° / -103.688513° (±15.5ft)
 Altitude: 3611ft (±11.1ft)
 Datum: WGS-84
 Azimuth/Heading: 115° SAE 2344mils True (±12°)
 Elevation Angle: -22.5°
 Horizontal Angle: -03.2°
 Camera: D1X
 F500, 4x5
 Marielisa O'Dell



Photograph 5

Date: 11/21/2023

Description: Excavation extent

View: Southeast

Date & Time: Tue, Nov 21, 2023 at 14:16:24 MST
 Position: -032.536801° / -103.688229° (±15.0ft)
 Altitude: 3600ft (±11.2ft)
 Datum: WGS-84
 Azimuth/Heading: 181° S019° 3210mils True (±12°)
 Elevation Angle: -30.5°
 Horizontal Angle: -12.4°
 Camera: D1X
 F500, 4x5
 Marielisa O'Dell



Photograph 6

Date: 11/21/2023

Description: Excavation extent

View: Southwest



Photograph 7

Date: 3/22/2024

Description: Backfill

View: Southeast



Photograph 8

Date: 3/22/2024

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

See page two for job notes and contact information.
Released to Imaging: 6/10/2024 5:42:41 PM



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

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.
▫	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
Date Collected: 06/19/23 10:10
Date Received: 06/19/23 15:52
Sample Depth: 0.5

Lab Sample ID: 890-4836-8
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		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	
OII 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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(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 Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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 %Recovery	MS Qualifier	Limits
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 Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	0.05300	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 %Recovery	MSD Qualifier	Limits
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 Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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 %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
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 Result	MB 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 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
Gasoline Range Organics (GRO)-C6-C10	1000	913.2		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	879.9		mg/Kg		88	70 - 130
Surrogate	LCS	LCS	Limits				
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						
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	MSD %Recovery	MSD Qualifier	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	
LCSD 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
LCSD 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
Date Collected: 06/19/23 09:25
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-1
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	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
Date Collected: 06/19/23 09:30
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	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
Date Collected: 06/19/23 09:35
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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
Date Collected: 06/19/23 09:40
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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
Date Collected: 06/19/23 09:40
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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
Date Collected: 06/19/23 09:55
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 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
Date Collected: 06/19/23 10:00
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 06/19/23 10:05
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 06/19/23 10:05
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 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
Date Collected: 06/19/23 10:10
Date Received: 06/19/23 15:52

Lab Sample ID: 890-4836-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
- 3
- 4
- 5
- 6
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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

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

Project Name:		Turn Around		ANALYSIS REQUEST										Preservative Codes							
Project Number:	03C1558249	☒ Routine ☐ Rush	Pres. Code												None: NO	DI Water: H ₂ O					
Project Location:		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 RECEIPT		Temp Blank:	(Yes No)	Wet Ice:	(Yes No)	 890-4836 Chain of Custody										H ₃ PO ₄ : HP					
Samples Received Intact:	(Yes No)	Thermometer ID:														NaHSO ₄ : NABIS					
Cooler Custody Seals:	(Yes No N/A)	Correction Factor:														Na ₂ S ₂ O ₃ : NaSO ₃					
Sample Custody Seals:	(Yes No N/A)	Temperature Reading:														Zn Acetate+NaOH: Zn					
Total Containers:		Corrected Temperature:														NaOH+Ascorbic Acid: SAPC					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)											Sample Comments	
5501	S	6/19/23	925	5'	G	1											Incident ID:				
5502			930			1											nAPP2316046257				
5503			935			1															
5504			940			1											Cost Center:				
5505			955			1											1148831001				
5506			1000			1											AFE:				
5507			1005			1															
5508			1010			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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	6-19-23 1552			
3					
5					

Revised Date: 08/25/2020 Rev. 2020.2

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4836-1

SDG Number: 03C1558249

Login Number: 4836

List Source: Eurofins Midland

List Number: 2

List Creation: 06/21/23 10:52 AM

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	



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

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

Case Narrative

Client: Ensolum
Project/Site: 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.

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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: 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
Date Collected: 07/14/23 10:00
Date Received: 07/14/23 13:00
Sample Depth: 1.5

Lab Sample ID: 890-4946-2
Matrix: Solid

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
Date Collected: 07/14/23 10:10
Date Received: 07/14/23 13:00
Sample Depth: 1

Lab Sample ID: 890-4946-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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

Date Collected: 07/14/23 10:20

Date Received: 07/14/23 13:00

Sample Depth: 1

Lab Sample ID: 890-4946-4

Matrix: Solid

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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(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				
LCSD 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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	1CO1	OTPH1						
		(70-130)	(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						
LCSD 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	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 Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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 %Recovery	MS 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 Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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 %Recovery	MSD 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 Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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
Oil 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 %Recovery	MB Qualifier	Limits					
1-Chlorooctane	162	S1+	70 - 130					
o-Terphenyl	155	S1+	70 - 130					

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 Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
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

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
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 Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
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 Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
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 Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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

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

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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	
LCSD 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
LCSD 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	
LCSD 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

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Lab Chronicle

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

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

Client Sample ID: BH01
Date Collected: 07/14/23 09:30
Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-1
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			5.04 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
Date Collected: 07/14/23 10:00
Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	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
Date Collected: 07/14/23 10:10
Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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
Date Collected: 07/14/23 10:20
Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	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

Date Collected: 07/14/23 10:20

Date Received: 07/14/23 13:00

Lab Sample ID: 890-4946-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

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

- 1
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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

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 Belill	Bill to: (if different)	Garrett Green
Company Name:	ENSOLUM, LLC	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	Garrett.Green@ExxonMobil.com

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

Project Name:	Hat Mesa 32-2		Turn Around	ANALYSIS REQUEST												Preservative Codes												
Project Number:	03C1558249		☒ Routine ☐ Rush	Pres. Code													None: NO	DI Water: H ₂ O										
Project Location:	32.53001 - 103.08800		Due Date:	5 days													Cool: Cool	MeOH: Me										
Sampler's Name:	Mariaha O'Dell		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC	HNO ₃ : HN										
PO #:																	H ₂ SO ₄ : H ₂	NaOH: Na										
SAMPLE RECEIPT				Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No	 890-4946 Chain of Custody												H ₃ PO ₄ : HP								
Samples Received Intact:	☒ Yes ☐ No	Thermometer ID:	TMM007																									NaHSO ₄ : NABIS
Cooler Custody Seals:	☒ Yes ☐ No	Correction Factor:	-0.0																									Na ₂ S ₂ O ₃ : NaSO ₃
Sample Custody Seals:	☒ Yes ☐ No	Temperature Reading:	22.2																									Zn Acetate+NaOH: Zn
Total Containers:			Corrected Temperature:	22.0																								NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides	TPH	BTEX	Sample Comments
BH01	S	7/14/23	9:30	2'	G	1	X	X	X	Incident #:
BH02	S	↓	10:00	15'	G	1	↓	↓	↓	nAPP 2316040257
BH03	S	↓	10:10	1'	G	1	↓	↓	↓	Cost Center:
BH04	S	↓	10:20	1'	G	1	↓	↓	↓	1148831001
										Ben Belill:
										bbelill@ensolum.com
										API:
										30-015-34819

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>M. O'Dell</i>	<i>Clue</i>	7.14.23 1300			
3					
5					

Revised Date: 08/25/2020 Rev. 2020.2

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	

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	



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
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
11/13/2023 12:38:26 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: 890-5563-1

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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

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
Date Collected: 11/01/23 09:20
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-1
Matrix: Solid

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
Date Collected: 11/01/23 09:25
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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
Oil 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
Date Collected: 11/01/23 09:45
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-6
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00201	U	0.00201	mg/Kg		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
Date Collected: 11/01/23 09:50
Date Received: 11/03/23 08:35
Sample Depth: 4

Lab Sample ID: 890-5563-7
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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	
Oil 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
Date Collected: 11/01/23 10:40
Date Received: 11/03/23 08:35
Sample Depth: 0-4

Lab Sample ID: 890-5563-11
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00202	U	0.00202	mg/Kg	-	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
Date Collected: 11/01/23 10:50
Date Received: 11/03/23 08:35
Sample Depth: 0-4

Lab Sample ID: 890-5563-12
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00199	U	0.00199	mg/Kg	-	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
Oil 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	
Oil 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
Date Collected: 11/02/23 14:00
Date Received: 11/03/23 08:35
Sample Depth: 0-3

Lab Sample ID: 890-5563-24
Matrix: Solid

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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(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

Job ID: 890-5563-1

Project/Site: Hat Mesa 32-2

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-5563-4	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

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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)

Lab Sample ID: MB 880-66261/5-A						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66350						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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66350						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						Client Sample ID: Lab Control Sample		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66350						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						Client Sample ID: Lab Control Sample Dup				
Matrix: Solid						Prep Type: Total/NA				
Analysis Batch: 66350						Prep Batch: 66320				
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	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				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 66350				Prep Batch: 66320							
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
		LCSD	LCSD								
Surrogate		%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)		128		70 - 130							
1,4-Difluorobenzene (Surr)		118		70 - 130							

Lab Sample ID: 890-5563-1 MS				Client Sample ID: FS01							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 66350				Prep Batch: 66320							
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
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		
		MS	MS								
Surrogate		%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)		123		70 - 130							
1,4-Difluorobenzene (Surr)		110		70 - 130							

Lab Sample ID: 890-5563-1 MSD				Client Sample ID: FS01							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 66350				Prep Batch: 66320							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
		MSD	MSD								
Surrogate		%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)		137	S1+	70 - 130							
1,4-Difluorobenzene (Surr)		113		70 - 130							

Lab Sample ID: MB 880-66434/5-A				Client Sample ID: Method Blank							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 66703				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	MB	MB	Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
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	MB	MB	Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
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 Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
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 Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
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 Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
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 Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
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 Result	MB 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 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

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
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				Client Sample ID: Lab Control Sample						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66344				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				Client Sample ID: Lab Control Sample Dup						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66344				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				Client Sample ID: Matrix Spike						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66344				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				Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66344				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

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<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						
1-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 Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
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					
1-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 Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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							
1-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

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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		
Surrogate	MS %Recovery	MS 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

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.5	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
Surrogate	MSD %Recovery	MSD 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	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 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

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	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									Client Sample ID: FS17		
Matrix: Solid									Prep Type: Soluble		
Analysis Batch: 66512											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limits
Chloride	127		250	374.8		mg/Kg		99	90 - 110	2	20

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

Date Collected: 11/01/23 09:20

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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

Date Collected: 11/01/23 09:25

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Date Collected: 11/01/23 09:30

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 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

Date Collected: 11/01/23 09:35

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 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
Date Collected: 11/01/23 09:35
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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
Date Collected: 11/01/23 09:40
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 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
Date Collected: 11/01/23 09:45
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/01/23 09:50
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/01/23 09:50
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 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
Date Collected: 11/01/23 09:55
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 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
Date Collected: 11/01/23 10:20
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
Date Collected: 11/01/23 10:30
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

Date Collected: 11/01/23 10:40

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Date Collected: 11/01/23 10:50

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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

Date Collected: 11/02/23 11:30

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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

Date Collected: 11/02/23 11:35

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	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

Date Collected: 11/02/23 11:35

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

Date Collected: 11/02/23 11:40

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

Date Collected: 11/02/23 12:25

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 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

Date Collected: 11/02/23 12:30

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

Date Collected: 11/02/23 12:30

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 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

Date Collected: 11/02/23 12:35

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	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

Date Collected: 11/02/23 12:40

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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

Date Collected: 11/02/23 12:45

Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
Date Collected: 11/02/23 12:50
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-21
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	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
Date Collected: 11/02/23 12:55
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
Date Collected: 11/02/23 13:00
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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
Date Collected: 11/02/23 14:00
Date Received: 11/03/23 08:35

Lab Sample ID: 890-5563-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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

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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

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



Environment Testing
Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 3

Project Manager:	Ben Belill	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 ☐ 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		Turn Around		ANALYSIS REQUEST										Preservative Codes						
Project Number:		03C1558249		☒ Routine ☐ Rush												None: NO DI Water: H ₂ O						
Project Location:				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 RECEIPT		Temp Blank:		☒ Yes ☐ No		Wet Ice:		☒ Yes ☐ No												H ₃ PO ₄ : HP		
Samples Received Intact:		☒ Yes ☐ No		Thermometer ID:		TMOU7												NaHSO ₄ : NABIS				
Cooler Custody Seals:		Yes ☐ No ☒ N/A		Correction Factor:		-0.2												Na ₂ S ₂ O ₃ : NaSO ₃				
Sample Custody Seals:		Yes ☐ No ☒ N/A		Temperature Reading:		2.4												Zn Acetate+NaOH: Zn				
Total Containers:				Corrected Temperature:		8.2												NaOH+Ascorbic Acid: SAPC				
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)											Sample Comments	
FS01		S	11/1/23	920	4	C	1	/	/	/											Incident ID:	
FS02				925			1	/	/	/											nAPP2316046257	
FS03				930			1	/	/	/												
FS04				935			1	/	/	/											Cost Center:	
FS05				940			1	/	/	/											1148831001	
FS06				945			1	/	/	/											AFE:	
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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	15:28 11/1/23			
3					
5					

Revised Date: 08/25/2020 Rev. 2020.2



Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 246-4200, 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 Belill	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 ☐ 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		Turn Around		ANALYSIS REQUEST												Preservative Codes							
Project Number:		03C1558249		☒ Routine ☐ Rush		Pres. Code														None: NO DI Water: H ₂ O					
Project Location:				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 RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No		Parameters														H ₃ PO ₄ : HP	
Samples Received Intact:		Yes No		Thermometer ID:						Parameters														NaHSO ₄ : NABIS	
Cooler Custody Seals:		Yes No N/A		Correction Factor:						Parameters														Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:		Yes No N/A		Temperature Reading:						Parameters														Zn Acetate+NaOH: Zn	
Total Containers:				Corrected Temperature:						Parameters														NaOH+Ascorbic Acid: SAPC	
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)													Sample Comments		
SW03		S	11/1/23	1040	0-4	C	1										Incident ID:								
SW04			↓	1050	0-4	C	1										nAPP2316046257								
FS09			11/2/23	1130	4		1										Cost Center:								
FS10				1135	4		1										1148831001								
FS11				1140	4		1										AFE:								
FS12				1225	3		1																		
FS13				1230			1																		
FS14				1235			1																		
FS15				1240			1																		
FS16		↓	↓	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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Garrett</i>	<i>alred</i>	15:28 11/2			
3					
5					



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

[illegible]

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	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					

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Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	<i>C. L. L. L.</i>	<i>C. L. L. L.</i>		15.28 11/13			
3					4		
5					6		

Revised Date: 08/25/2020 Rev. 2020.2

Age Group	Number of People
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14

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	

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	



Environment Testing

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

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.
▫	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

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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: 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
Date Collected: 11/03/23 08:55
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
OII 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
Date Collected: 11/03/23 09:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-4
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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	
OII 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
Date Collected: 11/03/23 09:15
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-7
Matrix: Solid

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
Date Collected: 11/03/23 09:20
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-8
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00198	U	0.00198	mg/Kg		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
Date Collected: 11/03/23 11:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-10
Matrix: Solid

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
Date Collected: 11/03/23 11:45
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		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
Date Collected: 11/03/23 11:45
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-11
Matrix: Solid

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
Date Collected: 11/03/23 11:10
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-12
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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: Ensolum
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
Date Collected: 11/03/23 11:40
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-21
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<0.00199	U	0.00199	mg/Kg		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
Date Collected: 11/03/23 13:30
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-22
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<0.00198	U	0.00198	mg/Kg		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	

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
Date Collected: 11/03/23 13:30
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-22
Matrix: Solid

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
Date Collected: 11/03/23 13:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-23
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00198	U	0.00198	mg/Kg		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
Date Collected: 11/03/23 13:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-23
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
OII 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
Date Collected: 11/03/23 14:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-24
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		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	
OII 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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(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
LCSD 880-66433/2-A	Lab Control Sample Dup	117	110
LCSD 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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66684						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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66683						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						Client Sample ID: Lab Control Sample		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66683						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						Client Sample ID: Lab Control Sample Dup		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 66683						Prep Batch: 66433		
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	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				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 66683				Prep Batch: 66433							
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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				Client Sample ID: FS20							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 66683				Prep Batch: 66433							
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
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				Client Sample ID: FS20							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 66683				Prep Batch: 66433							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.09887		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				Client Sample ID: Method Blank							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 66684				Prep Batch: 66532							
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
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	LCS	LCS	Unit	D	%Rec			
			Added	Result	Qualifier			%Rec			
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		

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	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
			Added	Result	Qualifier				Limits		Limit
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
		LCSD	LCSD								
Surrogate		%Recovery	Qualifier	Limits							
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

	MS	MS	
Surrogate	%Recovery	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

	MSD	MSD	
Surrogate	%Recovery	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

	MB	MB						
Surrogate	%Recovery	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		Dil Fac
	%Recovery	Qualifier			Analyzed	
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	
		Result	Qualifier				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 LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits			
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 Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec	
	Result	Qualifier		Result	Qualifier				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

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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: 890-5568-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	MSD %Recovery	MSD 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	MB %Recovery	MB 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	LCS %Recovery	LCS 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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
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

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
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	%Recovery	Qualifier	Limits							
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

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.6	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	%Recovery	Qualifier	Limits									
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

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		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	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
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				Client Sample ID: Lab Control Sample						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66475				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				Client Sample ID: Lab Control Sample Dup						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66475				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				Client Sample ID: FS37						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66475				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				Client Sample ID: FS37						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 66475				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				Client Sample ID: FS37			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 66475				Prep Batch: 66454			
	MSD	MSD					
Surrogate	%Recovery	Qualifier	Limits				
o-Terphenyl	140	S1+	70 - 130				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66337/1-A						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Soluble		
Analysis Batch: 66518								
	MB	MB						
Analyte	Result	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					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Soluble				
Analysis Batch: 66518									
			Spike	LCS	LCS			%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride			250	257.8		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-66337/3-A							Client Sample ID: Lab Control Sample Dup				
Matrix: Solid							Prep Type: Soluble				
Analysis Batch: 66518											
			Spike	LCSD	LCSD			%Rec		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	258.1		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5564-A-22-C MS							Client Sample ID: Matrix Spike			
Matrix: Solid							Prep Type: Soluble			
Analysis Batch: 66518										
	Sample	Sample	Spike	MS	MS					
Analyte	Result	Qualifier	Added	Result	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

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 66518

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	399	F1	249	592.2	F1	mg/Kg		78	90 - 110	1	20

Lab Sample ID: MB 880-66339/1-A						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Soluble		
Analysis Batch: 66519								
	MB	MB						
Analyte	Result	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							Client Sample ID: FS33					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 66529												
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	

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

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	

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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	
LCSD 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	
LCSD 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
LCSD 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

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

Date Collected: 11/03/23 08:45

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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

Date Collected: 11/03/23 08:50

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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

Date Collected: 11/03/23 08:55

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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

Date Collected: 11/03/23 09:00

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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
Date Collected: 11/03/23 09:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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
Date Collected: 11/03/23 09:25
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/03/23 09:30
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/03/23 09:15
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

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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: FS26
Date Collected: 11/03/23 09:15
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	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
Date Collected: 11/03/23 09:20
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 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
Date Collected: 11/03/23 10:55
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
Date Collected: 11/03/23 11:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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
Date Collected: 11/03/23 11:45
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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
Date Collected: 11/03/23 11:10
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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
Date Collected: 11/03/23 11:15
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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
Date Collected: 11/03/23 11:20
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	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

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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: FS33
Date Collected: 11/03/23 11:20
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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
Date Collected: 11/03/23 11:50
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 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
Date Collected: 11/03/23 11:30
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 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
Date Collected: 11/03/23 12:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

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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: FS36
Date Collected: 11/03/23 12:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 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
Date Collected: 11/03/23 10:10
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-18
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	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
Date Collected: 11/03/23 11:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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
Date Collected: 11/03/23 13:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

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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: SW09
Date Collected: 11/03/23 11:40
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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
Date Collected: 11/03/23 13:30
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	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
Date Collected: 11/03/23 13:35
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-23
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	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
Date Collected: 11/03/23 14:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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

Date Collected: 11/03/23 14:00

Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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

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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Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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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 Belli	Bill to: (if different)	Garrett Green
Company Name:	Enselum, 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:	bbelli@enselum.com

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

Project Name:		HAT MESA 32-2		Turn Around		ANALYSIS REQUEST										Preservative Codes						
Project Number:		03C155B249		☒ Routine ☐ Rush												None: NO DI Water: H ₂ O						
Project Location:		32.53601, -103.688		Due Date:												Cool: Cool MeOH: Me						
Sampler's Name:		Meredith Roberts		TAT starts the day received by the lab, if received by 4:30pm												HCL: HC HNO ₃ : HN						
P.O. #:																H ₂ SO ₄ : H ₂ NaOH: Na						
SAMPLE RECEIPT		Temp Blank: ☒ No ☐ Yes		Wet Ice: ☒ No ☐ Yes												H ₃ PO ₄ : HP						
Samples Received Intact:		☒ Yes ☐ No		Thermometer ID: T1007												NaHSO ₄ : NABIS						
Cooler Custody Seals:		Yes ☐ No ☒ N/A		Correction Factor: +0.2												Na ₂ S ₂ O ₃ : NaSO ₃						
Sample Custody Seals:		Yes ☐ No ☒ N/A		Temperature Reading: 7.2												Zn Acetate+NaOH: Zn						
Total Containers:				Corrected Temperature: 7.0												NaOH+Ascorbic Acid: SAPC						
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont											Sample Comments				
FS20		S	11/3/23	0845	3'	C	1	BTEX	Chlorides	TPH											Incident #:	
FS21				0850	3.5'																oAPP2316046257	
FS22				0855	3'																	
FS23				0900																	Cost Center:	
FS24				0925																	1148831001	
FS25				0930																		
FS26				0915																	mroberts@enselum.com	
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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Ben Belli</i>	<i>Al...</i>	14:49 10/3			

Revised Date: 08/25/2020 Rev. 2020.2



Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No:

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Project Manager:	Ben Beull	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, 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:	bbeull@ensolum.com

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

Project Name:		HAT MESA 32-2		Turn Around		ANALYSIS REQUEST												Preservative Codes							
Project Number:		03C1558249		☒ Routine ☐ Rush		Pres. Code														None: NO DI Water: H ₂ O					
Project Location:		32-53601-103.688		Due Date:																Cool: Cool MeOH: Me					
Sampler's Name:		Meredith Roberts		TAT starts the day received by the lab, if received by 4:30pm																HCL: HC HNO ₃ : HN					
PO #:																				H ₂ SO ₄ : H ₂ NaOH: Na					
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No		Parameters BTEx Chlorides TPH														H ₃ PO ₄ : HP	
Samples Received Intact:		Yes No		Thermometer ID:																NaHSO ₄ : NABIS					
Cooler Custody Seals:		Yes No N/A		Correction Factor:																Na ₂ S ₂ O ₃ : NaSO ₃					
Sample Custody Seals:		Yes No N/A		Temperature Reading:																Zn Acetate+NaOH: Zn					
Total Containers:				Corrected Temperature:																NaOH+Ascorbic Acid: SAPC					
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont													Sample Comments					
FS30		S	11/3/23	3'	1145	C	1	X	X	X													Cost Center: 1148831001		
FS31					1110																				
FS32					1115																				
FS33					1120																		Incident #: APP2316046257		
FS34					1150																				
FS35					1130																				
FS36					1235																		mrobert@ensolum.com		
SW06				0-3.5'	1000																				
SW07				0-3'	1010																				
SW08				0-3'	1135																				

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010 : 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Meredith Roberts</i>	<i>Garrett Green</i>	11/4/23 10:32			
3					
5					

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

Work Order No: _____

www.xenco.com Page 3 of 3

Project Manager:	Ben Bellill	Bill to: (if different)	Garrett Green
Company Name:	Ensoium, 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:	bbellill@ensoium.com

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

Project Name:		HAT MESA 32-2		Turn Around		ANALYSIS REQUEST										Preservative Codes									
Project Number:		03C1558249		☒ Routine ☐ Rush		Pres. Code												None: NO		DI Water: H ₂ O					
Project Location:		32-53601, -103-688		Due Date:														Cool: Cool		MeOH: Me					
Sampler's Name:		Meredith Roberts		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC		HNO ₃ : HN					
PO #:																		H ₂ SO ₄ : H ₂		NaOH: Na					
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No		Parameters BTEX Chlorides TPH										H ₃ PO ₄ : HP					
Samples Received Intact:		Yes No																		NaHSO ₄ : NABIS					
Cooler Custody Seals:		Yes No N/A																		Na ₂ S ₂ O ₃ : NaSO ₃					
Sample Custody Seals:		Yes No N/A																		Zn Acetate+NaOH: Zn					
Total Containers:																				NaOH+Ascorbic Acid: SAPC					
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Grab/Comp		# of Cont												Sample Comments	
SW09		S		11/3/23		1300		0-3'		C		1												Incident #:	
SW10		↓		↓		1140		0-3'		↓		↓												NAPP2316046257	
FS37		↓		↓		1330		3'		↓		↓													
FS38		↓		↓		1335		3'		↓		↓												Cost Center:	
																								1148831001	
																								mroberts@ensolun.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 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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Meares</i>	<i>abraham</i>	14:49 10/8			
3					
5			5		

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	

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	



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



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12/4/2023 12:19:07 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: 890-5674-1
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.
¤	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

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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: 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
Oil 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

Eurofins Carlsbad

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

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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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	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			

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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 68011						Prep Batch: 67908		
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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	MB %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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 68011						Prep Batch: 67964		
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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	MB %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						Client Sample ID: Lab Control Sample		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 68011						Prep Batch: 67964		
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	0.100	0.08433		mg/Kg		84	70 - 130	
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						Client Sample ID: Lab Control Sample Dup		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 68011						Prep Batch: 67964		
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	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			
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

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
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	
									Limits	
Benzene	<0.00199	U	0.0996	0.07313		mg/Kg		73	70 - 130	
Toluene	<0.00199	U	0.0996	0.07287		mg/Kg		73	70 - 130	
Ethylbenzene	<0.00199	U F1	0.0996	0.06371	F1	mg/Kg		64	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1435		mg/Kg		72	70 - 130	
o-Xylene	<0.00199	U F1	0.0996	0.06858	F1	mg/Kg		69	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
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			
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

Surrogate	MSD		Limits
	%Recovery	Qualifier	
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		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 Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
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				
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						
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 Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
	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	MSD %Recovery	MSD Qualifier	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

Lab Chronicle

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

Job ID: 890-5674-1
SDG: 03C1558249

Client Sample ID: FS17A
Date Collected: 11/21/23 12:40
Date Received: 11/21/23 15:16

Lab Sample ID: 890-5674-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	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
Date Collected: 11/21/23 10:20
Date Received: 11/21/23 15:16

Lab Sample ID: 890-5674-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	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
Date Collected: 11/21/23 12:45
Date Received: 11/21/23 15:16

Lab Sample ID: 890-5674-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 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
Date Collected: 11/21/23 12:35
Date Received: 11/21/23 15:16

Lab Sample ID: 890-5674-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 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

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-5674-1
SDG: 03C1558249

Client Sample ID: FS16A
Date Collected: 11/21/23 12:35
Date Received: 11/21/23 15:16

Lab Sample ID: 890-5674-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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
Date Collected: 11/21/23 10:30
Date Received: 11/21/23 15:16

Lab Sample ID: 890-5674-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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
Date Collected: 11/21/23 12:50
Date Received: 11/21/23 15:16

Lab Sample ID: 890-5674-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

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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Environment Testing
Xenon

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

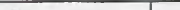
Project Manager:	Ben Belili	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Greene St.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	Garrett.Green@ExxonMobil.com

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

Project Name:		Turn Around						ANALYSIS REQUEST								
Project Number:		☒ Routine ☐ Rush						Pres. Code								
Project Location:		Due Date:														
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm														
PO #:																
SAMPLE RECEIPT		Temp Blank:		☒ Yes No		Wet Ice:		☒ Yes No		Parameters chlorides TPH BTEX 890-5674 Chain of Custody _____ 						
Samples Received Intact:		☒ Yes No		Thermometer ID:		TMN007										
Cooler Custody Seals:		Yes No		Correction Factor:		-0.2										
Sample Custody Seals:		Yes No		Temperature Reading:		U.2										
Total Containers:				Corrected Temperature:		U.O.										
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont										
FS17A	S	11/21/23	12:40	4'	C	1 X										
FS18 A	S		10:20	4'	C	1										
FS19 A	S		12:45	4'	C	1										
FS16A	S		12:35	4'	C	1										
-SW11	S		10:30	0'-4'	C	1 Y										
FSO4A	S	X	12:50	5'	C	1 Y										
PRESERVATIVE CODES																
None: NO	Dl Water: H ₂ O															
Cool: Cool	MeOH: Me															
HCL: HC	HNO ₃ : HN															
H ₂ SO ₄ : H ₂	NaOH: Na															
H ₃ PO ₄ : HP																
NaHSO ₄ : NABIS																
Na ₂ S ₂ O ₃ : NaSO ₃																
Zn Acetate+NaOH: Zn																
NaOH+Ascorbic Acid: SAPC																
Sample Comments																
Incident #: nAPP231604025																
Cost Center: L148831001																
API: 30-025-348																
Ben Beill: bbeille@ensolum.com																
MID																

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010 : 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
1				15.16	11/21
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6					

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 Source: Eurofins Carlsbad

List Number: 1

Creator: Lopez, Abraham

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5674-1

SDG Number: 03C1558249

Login Number: 5674

List Source: Eurofins Midland

List Number: 2

List Creation: 11/28/23 11:33 AM

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	



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



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
11/30/2023 2:41:39 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: 890-5676-1
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

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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 (70-130)	DFBZ1 (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 (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
890-5676-1	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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 67897						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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 67897						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						Client Sample ID: Lab Control Sample		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 67897						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						Client Sample ID: Lab Control Sample Dup		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 67897						Prep Batch: 67961		
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
Benzene	0.100	0.07809		mg/Kg		78	70 - 130	0 35

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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		RPD	Limit
							Limits			
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

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
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	
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	

Surrogate	MS		Limits
	%Recovery	Qualifier	
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		RPD	Limit
									Limits			
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

Surrogate	MSD		Limits
	%Recovery	Qualifier	
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		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: 890-5676-1
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	LCS	Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	
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	RPD	Limit
		Result	Qualifier				Limits		
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	
	Result	Qualifier		Result	Qualifier				Limits	
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: 890-5676-1
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

[illegible]

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	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	RPD	RPD
							Limits		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

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QC Association Summary

Client: Ensolum
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	

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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

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

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

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

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



Environment Testing
Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

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

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

Project Name:		Hat Mesa 32-2		Turn Around				ANALYSIS REQUEST										Preservative Codes							
Project Number:		03C1558249		☒ Routine ☐ Rush		Pres. Code												None: NO DI Water: H ₂ O							
Project Location:		32 53001 -103 088		Due Date:		5 days												Cool: Cool MeOH: Me							
Sampler's Name:		Mariah O'Dell		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC HNO ₃ : HN							
P.O. #:																		H ₂ SO ₄ : H ₂ NaOH: Na							
SAMPLE RECEIPT		Temp Blank:		☒ Yes ☐ No		Wet Ice:		☒ Yes ☐ No												H ₃ PO ₄ : HP					
Samples Received Intact:		☒ Yes ☐ No		Thermometer ID:		TJN00												NaHSO ₄ : NABIS							
Cooler Custody Seals:		Yes No ☒ NA		Correction Factor:		-0.2												Na ₂ S ₂ O ₃ : NaSO ₃							
Sample Custody Seals:		Yes No ☒ NA		Temperature Reading:		4.7												Zn Acetate+NaOH: Zn							
Total Containers:				Corrected Temperature:		4.0												NaOH+Ascorbic Acid: SAPC							
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Grab/Comp		# of Cont												Sample Comments	
SW02A		S		11/21/23		11:55		0-5'		C		1												Incident#:	
																								NAPP 23100 46257	
																								Cost center:	
																								1148831001	
																								API #:	
																								30-025-34819	
																								Ben Belill:	
																								bbelill@ensolum.com	
																								MO	

Total 200.7/6010	200.8/6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>M. O'Dell</i>	<i>alred</i>	15:16 11/21			
3					
5					

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5676-1

SDG Number: 03C1558249

Login Number: 5676

List Source: Eurofins Carlsbad

List Number: 1

Creator: Lopez, Abraham

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5676-1

SDG Number: 03C1558249

Login Number: 5676

List Source: Eurofins Midland

List Number: 2

List Creation: 11/28/23 11:33 AM

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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QUESTIONS

Action 352804

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 352804
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2316046257
Incident Name	NAPP2316046257 HAT MESA 32 STATE 2 @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	HAT MESA 32 STATE 2
Date Release Discovered	05/27/2023
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
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	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: 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 352804

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	352804
Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

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	Unavailable.
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	Not answered.

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: Amy Ruth Title: Coordinator SSHE Environmental Email: amy.ruth@exxonmobil.com Date: 06/10/2024
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QUESTIONS, Page 3

Action 352804

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	352804
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	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 352804

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 352804
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>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.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(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	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>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>	
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: Amy Ruth Title: Coordinator SSHE Environmental Email: amy.ruth@exxonmobil.com Date: 06/10/2024
<i>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.</i>	

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QUESTIONS, Page 5

Action 352804

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	352804
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 352804

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	352804
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	352802
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/22/2023
What was the (estimated) number of samples that were to be gathered	35
What was the sampling surface area in square feet	7141

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	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.

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 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: Amy Ruth Title: Coordinator SSHE Environmental Email: amy.ruth@exxonmobil.com Date: 06/10/2024
--	---

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QUESTIONS, Page 7

Action 352804

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	352804
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 352804

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 352804
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	8/1/2024