District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2316046257
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Garrett Green	Contact Telephone 575-200-0729
Contact email garrett.green@exxonmobil.com	Incident # *(assigned by OCD)*
Contact mailing address 3104 E. Greene Street, Carlsbad, New Mexico, 88220	

Location of Release Source

Latitude 32.53601 Longitude -103.68800
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Hat Mesa 32-2	Site Type Production well
Date Release Discovered 05/27/23	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
C	32	20S	33E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 1.90	Volume Recovered (bbls) 0.33
☒ Produced Water	Volume Released (bbls) 15.40	Volume Recovered (bbls) 2.67
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Flowline developed a leak due to corrosion, releasing fluids to soil. A vacuum truck recovered all free fluids. A third-party contractor has been retained for remediation purposes.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316046257
District RP	
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release? N/A

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
N/A

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:
NA

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Garrett Green Title: SSHE Coordinator

Signature:  Date: 06/09/2023

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

OCD Only

Received by: Jocelyn Harimon Date: 06/09/2023

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**

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 225946

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 225946
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	6/9/2023

Incident ID	NAPP2316046257
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	51-100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316046257
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Garrett Green Title: Enviornmental Coordinator

Signature:  Date: Nov 22 2023

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

OCD Only

Received by: Shelly Wells Date: 11/22/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316046257
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Garrett Green Title: Environmental Coordinator

Signature: Garrett Green Date: Nov 22 2023

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

OCD Only

Received by: Shelly Wells Date: 11/22/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Nelson Velez Date: 03/11/2024

ENSOLUM

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 absense 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.

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 organice (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.

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

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

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

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

Sincerely,
Ensolum, LLC

Benjamin J. Belill
Project Geologist

Tacoma Morrissey
Senior Geologist, MS

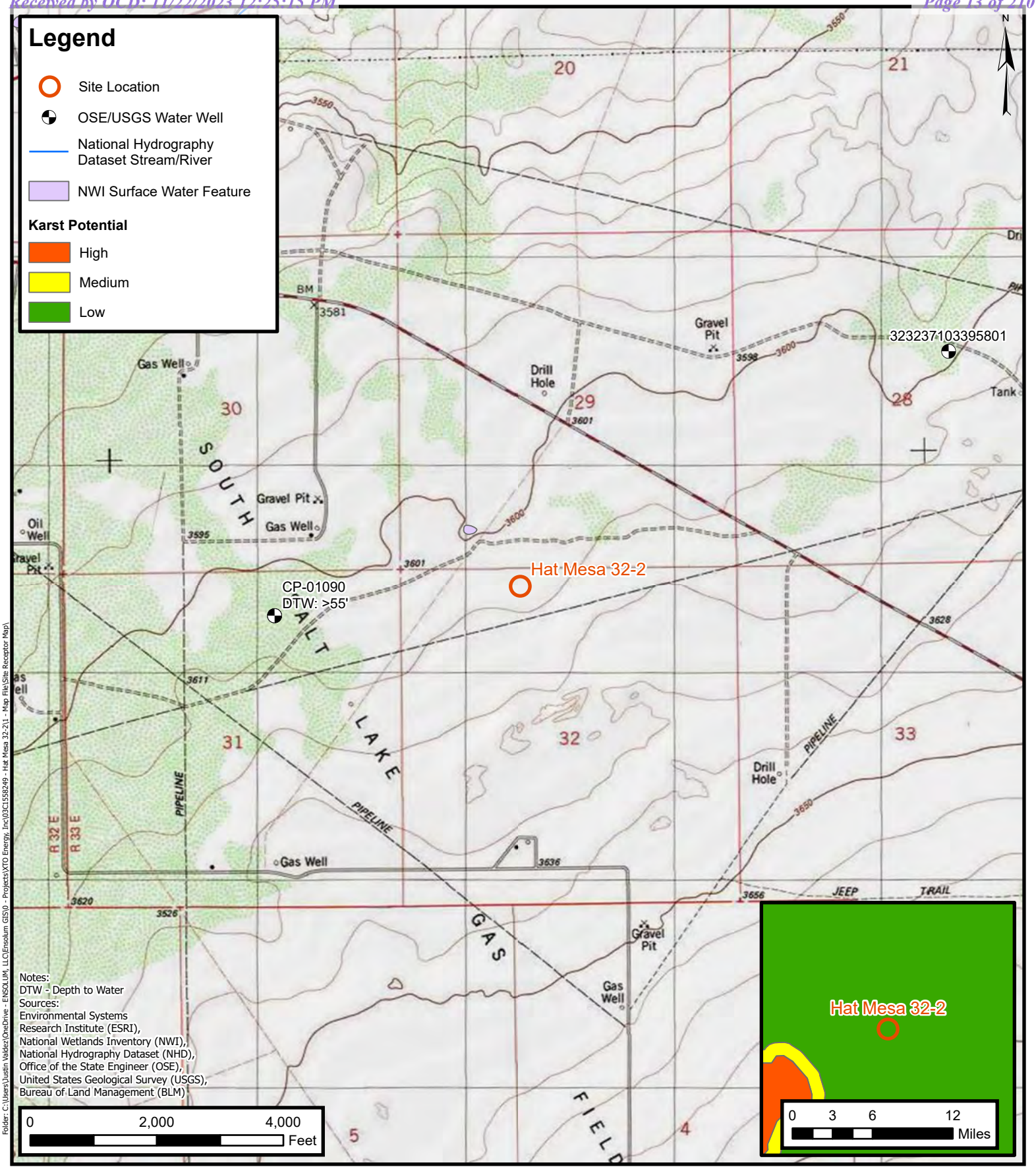
cc: Garrett Green, XTO
Tommee Lambert, XTO
NMSLO - ECO

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

ENSOLUM

FIGURES



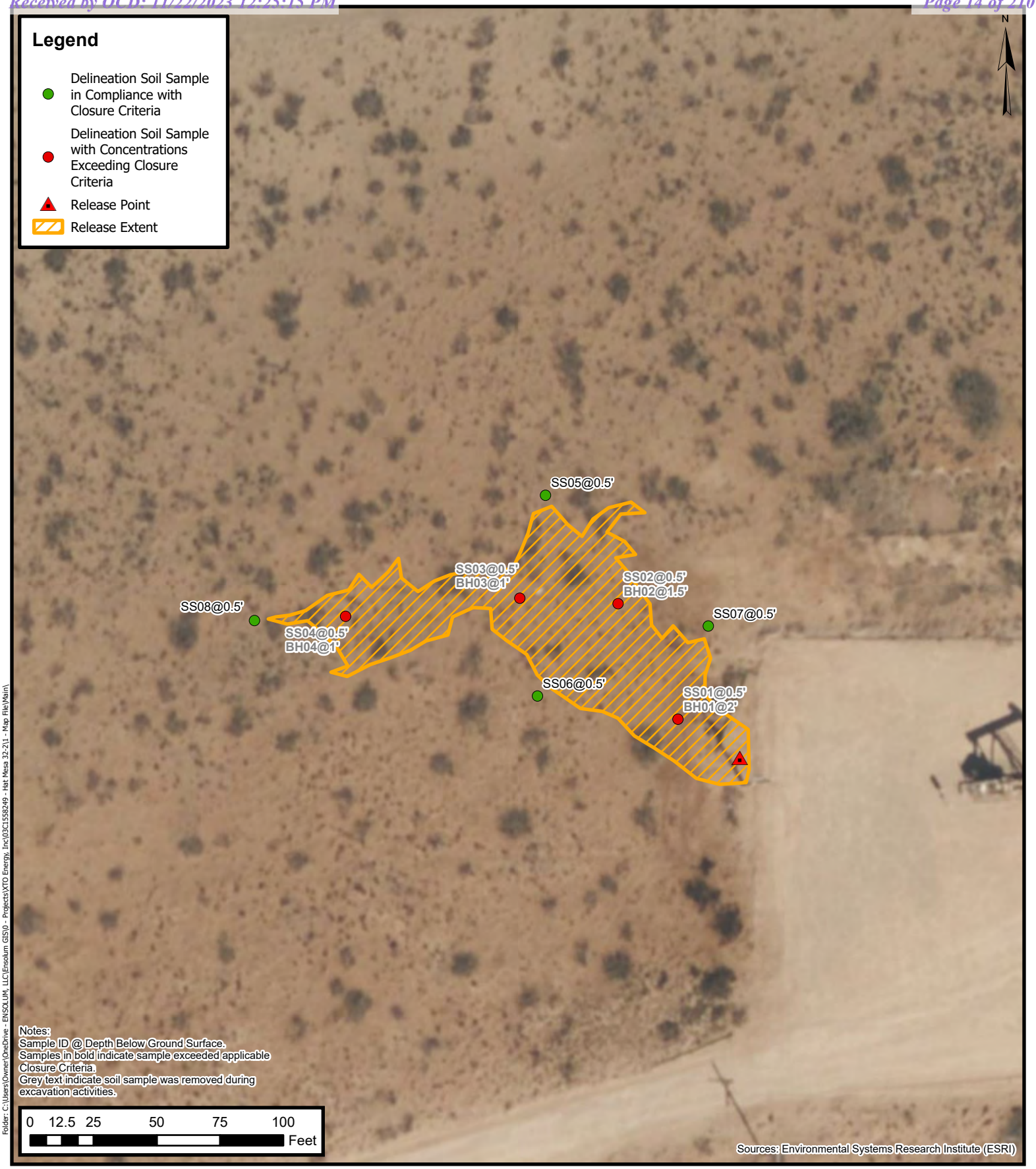
Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558249 - Hat Mesa 32-21 - Map File\Site Receptor Map\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

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

FIGURE 1



Folder: C:\Users\Owner\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558249 - Hat Mesa 32-2\1 - Map File\Main\

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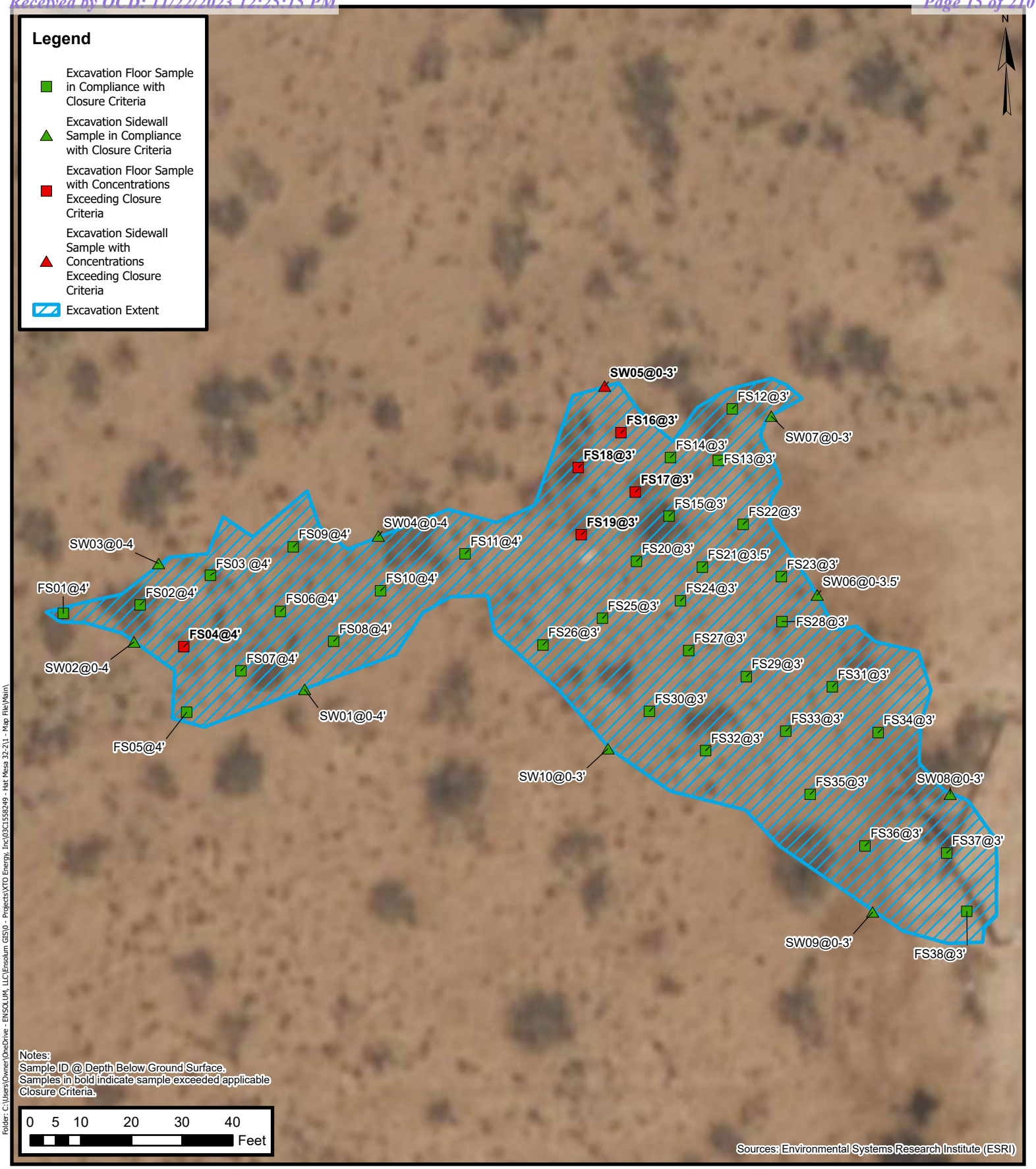
Delineation Soil Sample Locations

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

FIGURE 2



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Environmental, Engineering and Hydrogeologic Consultants

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

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TABLES

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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

ENSOLUM

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

ENSOLUM

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:

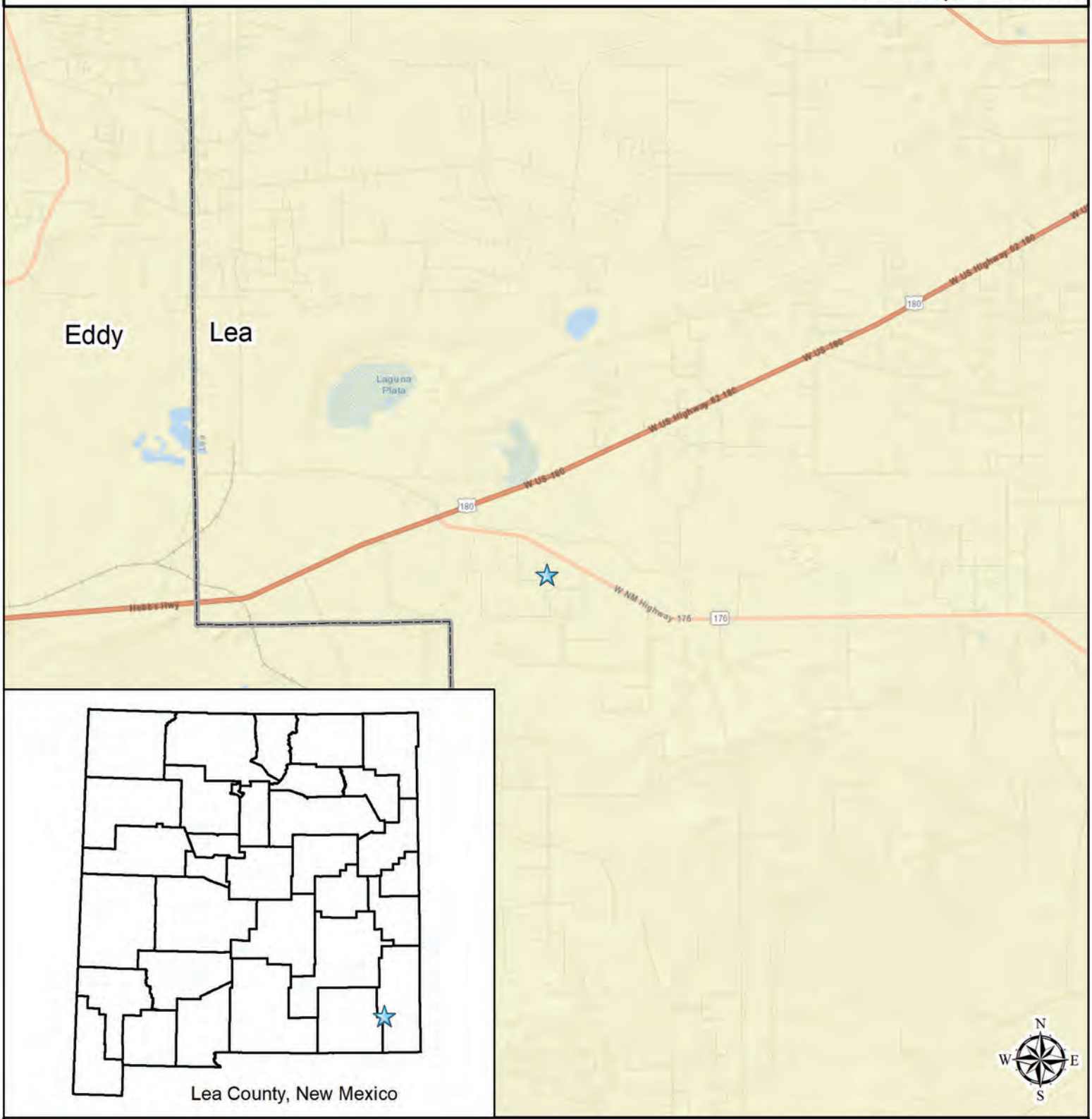
Date Exhibit Routed to Cultural Resources Office:

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



Legend

☆ Project Location

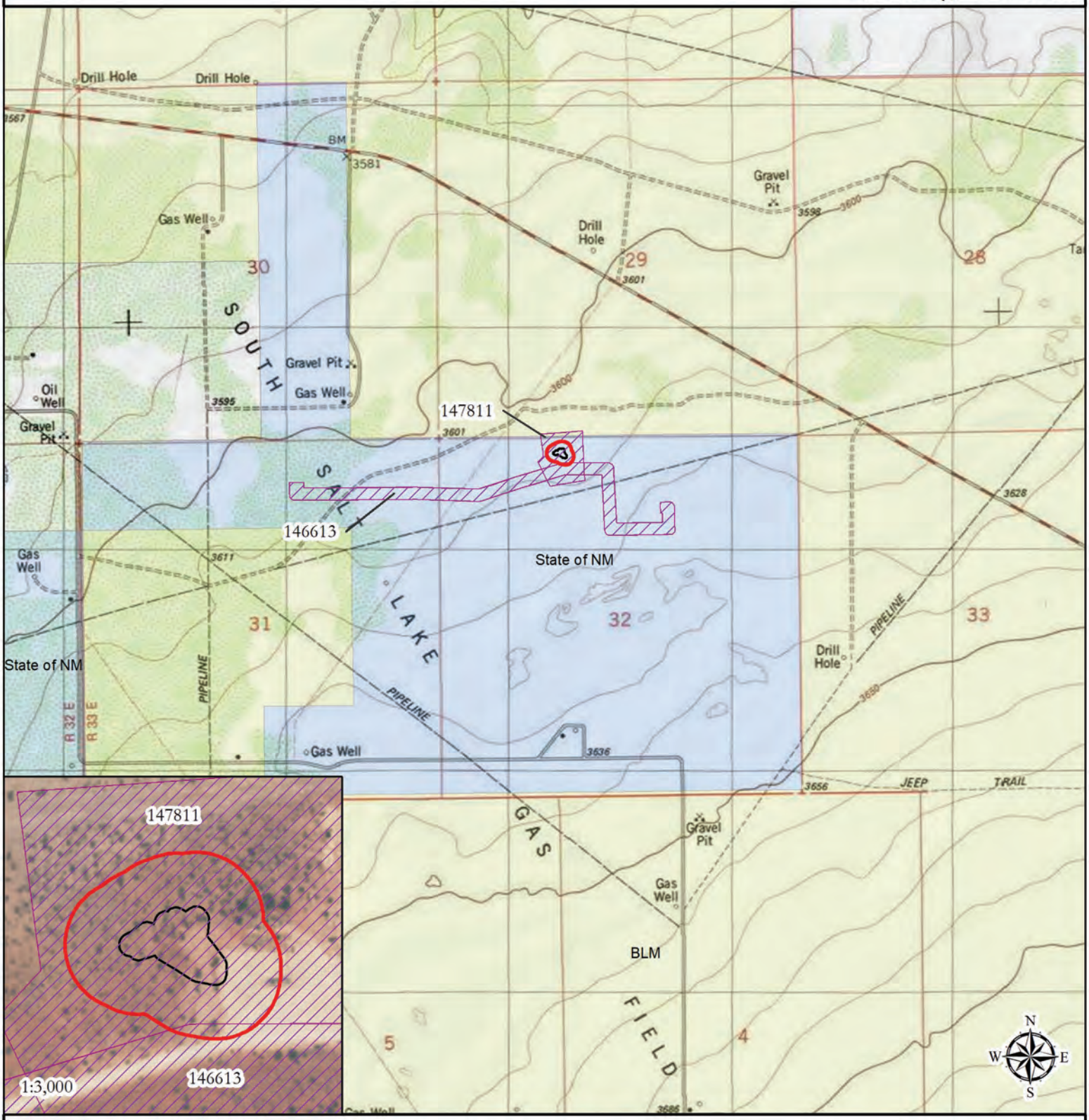
0 3,000 6,000 9,000 12,000 Meters
0 1.5 3 4.5 6 Miles

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

MS

Beaver Creek ARCHAEOLOGY

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



Legend

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

0 200 400 800 1,200 1,600 Meters
0 0.125 0.25 0.5 0.75 1 Miles

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

MS

ENSOLUM

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.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1		CP-1090

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Devon Energy Corporation	405-318-4697

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6488 Seven Rivers Highway	Artesia	NM	88210

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	36	39.32	N
	LONGITUDE	104	4	58.53	W

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

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

Unit Letter "N", Section 33, T19S, R29E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1755	John Norris	Hungry Horse, LLC

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
7/15/2022	7/15/2022		55	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	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
			No Casing				

OSE DIT AUG 2022 PM 4:42

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
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 20S.33E.31.1.1.2	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	20	20	Sand	Y ✓ N	
20	30	10	Caliche	Y ✓ N	
30	35	5	Clay	Y ✓ N	
35	55	20	Gypsum	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				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.

RECEIVED OSE DIV AUG 5 2022 PM 1:42

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 — 7/25/2022

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. CP-01090	POD NO. 1	TRN NO. 602836
LOCATION 20S.33E.31.1.1.2	WELL TAG ID NO.	PAGE 2 OF 2

ENSOLUM

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	Logged By: Mariaha O'Dell	Method: Hand Auger
Coordinates: 32.536036, -103.688066	Hole Diameter: 3.5"	Total Depth: 2' bgs

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP	SAND, brown, poorly graded, very fine grain, some silt, dark brown staining, strong H/C odor.
M	6,820	502	Y	SS01	0.5			
M	19,768	0.0	Y			1		
M	9,240	0.0	N	BH01	2	2		No stain and mild H/C odor.

Total Depth @ 2 feet bgs (auger refusal).

ENSOLUM

	Sample Name: BH02	Date: 7/14/2023
	Site Name: Hat Mesa 32-2	
	Incident Number: nAPP2316046257	
	Job Number: 03C1558249	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Mariaha O'Dell	Method: Hand Auger
Coordinates: 32.536162, -103.688143	Hole Diameter: 3.5"	Total Depth: 1.5' bgs

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP	SAND, brown, poorly graded, very fine grain, some silt, dark brown staining, strong H/C odor.
M	6,820	24.1	Y	SS02	0.5			
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).

ENSOLUM

	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
						0	SP	SAND, brown, poorly graded, very fine grain, some silt, dark brown staining, strong H/C odor.
M	13,232	267	Y	SS03	0.5			
M	549	0.0	N	BH03	1	1		No stain and mild H/C odor.

Total Depth @ 1 feet bgs (auger refusal).

ENSOLUM

	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
						0	SP	SAND, brown, poorly graded, very fine grain, some silt, dark brown staining, strong H/C odor.
M	212	607	Y	SS04	0.5			
M	16,486	28.5	N	BH04	1	1		No stain and mild H/C odor.

Total Depth @ 1 feet bgs (auger refusal).

ENSOLUM

APPENDIX D

Photographic Log

ENSOLUM

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

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

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

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

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

ENSOLUM

APPENDIX E

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

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.

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

Table of Contents

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
Matrix: Solid
Date Collected: 06/19/23 09:25
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
Matrix: Solid
Date Collected: 06/19/23 09:30
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

Client Sample Results

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

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

Client Sample ID: SS02

Date Collected: 06/19/23 09:30
Date Received: 06/19/23 15:52
Sample Depth: 0.5

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

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

Date Collected: 06/19/23 09:35
Date Received: 06/19/23 15:52
Sample Depth: 0.5

Lab Sample ID: 890-4836-3
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		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

Client Sample Results

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

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

Client Sample ID: SS03

Date Collected: 06/19/23 09:35
Date Received: 06/19/23 15:52
Sample Depth: 0.5

Lab Sample ID: 890-4836-3

Matrix: Solid

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

Date Collected: 06/19/23 09:40
Date Received: 06/19/23 15:52
Sample Depth: 0.5

Lab Sample ID: 890-4836-4

Matrix: Solid

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

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
Matrix: Solid
Date Collected: 06/19/23 09:40
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
Oll 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
Matrix: Solid
Date Collected: 06/19/23 09:55
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
Oll 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

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
Matrix: Solid
Date Collected: 06/19/23 10:00
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
OII 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
Matrix: Solid
Date Collected: 06/19/23 10:05
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*

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
Matrix: Solid
Date Collected: 06/19/23 10:05
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
OII 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
Matrix: Solid
Date Collected: 06/19/23 10:10
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

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

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

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

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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		

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

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 Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/21/23 14:55	06/23/23 09:08	1
OII 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 %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
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 %Recovery*	*LCS Qualifier*	*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 %Recovery*	*LCSD Qualifier*	*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 Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
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 %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

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

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	

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	

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

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

Eurofins Carlsbad

Lab Chronicle

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

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

Client Sample ID: SS07

Lab Sample ID: 890-4836-7

Date Collected: 06/19/23 10:05
Matrix: Solid
Date Received: 06/19/23 15:52

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

Client Sample ID: SS08

Lab Sample ID: 890-4836-8

Date Collected: 06/19/23 10:10
Matrix: Solid
Date Received: 06/19/23 15:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	56020	06/21/23 13:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56082	06/23/23 05:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56211	06/23/23 14:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			56351	06/26/23 11:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	56026	06/21/23 14:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56147	06/23/23 14:08	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	55910	06/20/23 10:31	KS	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	56018	06/21/23 20:34	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Midland

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

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

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

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

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

Chain of Custody

eurofins | Environment Testing Xenco

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

Work Order No: _____

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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	
Project Number:	03C1558249	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TMAD
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
SS01	S	6/19/23	925	.5'	G	1				
SS02			930			1				
SS03			935			1				
SS04			940			1				
SS05			955			1				
SS06			1000			1				
SS07			1005			1				
SS08			1010			1				
										GW

890-4836 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID:
nAPP2316046257

Cost Center:
1148831001

AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		6-19-23 1552	2		
3			4		
5			6		

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 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	

eurofins | Environment Testing

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

See page two for job notes and contact information.

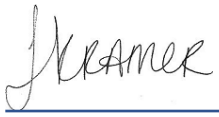
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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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

Table of Contents

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
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

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

Job ID: 890-4946-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4946-1

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

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

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

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

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

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

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

Client Sample Results

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

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

Client Sample ID: BH01

Lab Sample ID: 890-4946-1
Matrix: Solid
Date Collected: 07/14/23 09:30
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
OII 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
Matrix: Solid
Date Collected: 07/14/23 10:00
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*

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
OII 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

Client Sample Results

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

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

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 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
OII 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

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: 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
OII 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*

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)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(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		

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
OII 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

QC Sample Results

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

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

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

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

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

Surrogate	LCS %Recovery	LCS 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

Surrogate	LCSD %Recovery	LCSD 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

Surrogate	MS %Recovery	MS 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

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

QC Sample Results

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

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

Method: 300.0 - Anions, Ion Chromatography

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

Client Sample ID: Method Blank
Prep Type: Soluble

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

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

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

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

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	250.3		mg/Kg		100	90 - 110	0	20

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

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1470		1250	2771		mg/Kg		104	90 - 110		

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

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1470		1250	2778		mg/Kg		104	90 - 110	0	20

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

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	141		249	383.0		mg/Kg		97	90 - 110		

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

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	141		249	383.1		mg/Kg		97	90 - 110	0	20

QC Association Summary

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

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

GC VOA

Prep Batch: 57844

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

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

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

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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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:	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	
Project Number:	03C1558249	☒ Routine ☐ Rush	
Project Location:	32.531001, -103.608800	Due Date:	5 days
Sampler's Name:	Mariaha O'Dell	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR#007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.2
Total Containers:		Corrected Temperature:	2.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Chlorides	TPH	BTEX
BH01	S	7/14/23	9:30	2'	G	1		X	X	X
BH02	S	↓	10:00	1.5'	G	1		↓	↓	↓
BH03	S		10:10	1'	G	1				
BH04	S		10:20	1'	G	1				

890-4946 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident #:
nAPP2316046257
Cost Center:
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 Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 M. O'Dell		7.14.23 1300			
3			4		
5			6		

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	

eurofins | Environment Testing

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

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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

Table of Contents

Definitions/Glossary

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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

Case Narrative

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

Client Sample ID: FS01
Lab Sample ID: 890-5563-1
Date Collected: 11/01/23 09:20
Matrix: Solid
Date Received: 11/03/23 08:35
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/07/23 22:03	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		11/06/23 17:11	11/07/23 22:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/07/23 22:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/06/23 17:11	11/07/23 22:03	1

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

Method: TAL SOP Total BTEX - Total BTEX Calculation

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

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/07/23 13:27	1

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

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

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

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: FS02
Lab Sample ID: 890-5563-2
Date Collected: 11/01/23 09:25
Matrix: Solid
Date Received: 11/03/23 08:35
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/07/23 22:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/07/23 22:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/07/23 22:24	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		11/06/23 17:11	11/07/23 22:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/07/23 22:24	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/06/23 17:11	11/07/23 22:24	1

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

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII 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

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
Matrix: Solid
Date Collected: 11/01/23 09:30
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
OII 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
Matrix: Solid
Date Collected: 11/01/23 09:35
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
OII 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*

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		11/06/23 16:26	11/07/23 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*11/06/23 16:26*	*11/07/23 14:55*	*1*
o-Terphenyl	*118*		*70 - 130*	*11/06/23 16:26*	*11/07/23 14:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample Results

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

Job ID: 890-5563-1

Client Sample ID: FS06

Lab Sample ID: 890-5563-6
Matrix: Solid
Date Collected: 11/01/23 09:45
Date Received: 11/03/23 08:35
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/06/23 17:11	11/07/23 23:46	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/06/23 17:11	11/07/23 23:46	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/06/23 17:11	11/07/23 23:46	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		11/06/23 17:11	11/07/23 23:46	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/06/23 17:11	11/07/23 23:46	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/06/23 17:11	11/07/23 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*11/06/23 17:11*	*11/07/23 23:46*	*1*
1,4-Difluorobenzene (Surr)	*56*	*S1-*	*70 - 130*	*11/06/23 17:11*	*11/07/23 23:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

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

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/07/23 15:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		11/06/23 16:26	11/07/23 15:17	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/06/23 16:26	11/07/23 15:17	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/06/23 16:26	11/07/23 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*142*	*S1+*	*70 - 130*	*11/06/23 16:26*	*11/07/23 15:17*	*1*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*11/06/23 16:26*	*11/07/23 15:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: FS07

Lab Sample ID: 890-5563-7
Matrix: Solid
Date Collected: 11/01/23 09:50
Date Received: 11/03/23 08:35
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/08/23 00:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/08/23 00:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/08/23 00:06	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		11/06/23 17:11	11/08/23 00:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/06/23 17:11	11/08/23 00:06	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/06/23 17:11	11/08/23 00:06	1

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

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII 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

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII 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
OII 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*

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII 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

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
Matrix: Solid
Date Collected: 11/01/23 10:40
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
OII 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
Matrix: Solid
Date Collected: 11/01/23 10:50
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*

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII 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

Eurofins Carlsbad

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
Matrix: Solid
Date Collected: 11/02/23 11:30
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
OII 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
Matrix: Solid
Date Collected: 11/02/23 11:35
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
OII 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*

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII 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

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
Matrix: Solid
Date Collected: 11/02/23 12:25
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
OII 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
Matrix: Solid
Date Collected: 11/02/23 12:30
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*

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII 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

Eurofins Carlsbad

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
Matrix: Solid
Date Collected: 11/02/23 12:35
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
OII 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
Matrix: Solid
Date Collected: 11/02/23 12:40
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
OII 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*

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
Matrix: Solid
Date Collected: 11/02/23 12:40
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
Matrix: Solid
Date Collected: 11/02/23 12:45
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
OII 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

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
Matrix: Solid
Date Collected: 11/02/23 12:50
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
OII 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
Matrix: Solid
Date Collected: 11/02/23 12:55
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*

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
OII 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

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
Matrix: Solid
Date Collected: 11/02/23 13:00
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
OII 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
Matrix: Solid
Date Collected: 11/02/23 14:00
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
OII 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*

Client Sample Results

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

Client Sample ID: SW05
Lab Sample ID: 890-5563-24
Date Collected: 11/02/23 14:00
Matrix: Solid
Date Received: 11/03/23 08:35
Sample Depth: 0-3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

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

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

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid | **Prep Type: Total/NA**

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

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

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 890-5563-1

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

QC Sample Results

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

Job ID: 890-5563-1

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

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

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

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

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

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

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

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

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

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

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0994	0.07596		mg/Kg		76	70 - 130	13	35
Toluene	<0.00200	U	0.0994	0.08122		mg/Kg		82	70 - 130	10	35
Ethylbenzene	<0.00200	U	0.0994	0.09335		mg/Kg		94	70 - 130	14	35
m-Xylene & p-Xylene	<0.00399	U *+	0.199	0.1936		mg/Kg		97	70 - 130	15	35
o-Xylene	<0.00200	U	0.0994	0.09287		mg/Kg		93	70 - 130	15	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: MB 880-66434/5-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66434

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:54	11/11/23 04:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:54	11/11/23 04:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/07/23 15:54	11/11/23 04:38	1

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 Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
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 %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*11/07/23 15:54*	*11/11/23 04:38*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*11/07/23 15:54*	*11/11/23 04:38*	*1*

Lab Sample ID: MB 880-66435/5-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66435

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
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 %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*11/07/23 15:55*	*11/11/23 18:17*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*11/07/23 15:55*	*11/11/23 18:17*	*1*

Lab Sample ID: LCS 880-66435/1-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66435

Analyte			Spike Added	LCS 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 %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*

Lab Sample ID: LCSD 880-66435/2-A
Matrix: Solid
Analysis Batch: 66703

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66435

Analyte			Spike Added	LCSD 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

QC Sample Results

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

Job ID: 890-5563-1

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	75		70 - 130

Lab Sample ID: 890-5569-A-21-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 66703 — **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

Surrogate	MS %Recovery	MS 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 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 66703 — **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

Surrogate	MSD %Recovery	MSD 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 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 66344 — **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
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/06/23 16:26	11/07/23 09:24	1

Surrogate	MB %Recovery	MB 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

QC Sample Results

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

Job ID: 890-5563-1

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

Lab Sample ID: LCS 880-66313/2-A
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66313

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1009		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	946.0		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Lab Sample ID: LCSD 880-66313/3-A
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66313

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: 890-5566-A-8-C MS
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	1233		mg/Kg		121	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1128		mg/Kg		111	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*126*		*70 - 130*
o-Terphenyl	*109*		*70 - 130*

Lab Sample ID: 890-5566-A-8-D MSD
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*127*		*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: 890-5566-A-8-D MSD
Matrix: Solid
Analysis Batch: 66344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66313

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-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 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 16:30	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
OII 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 %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	243	S1+	70 - 130	11/06/23 16:30	11/07/23 09:02	1
o-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 %Recovery	LCS Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-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 %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	1010	937.0		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	56.3	*1	1010	1092		mg/Kg		103	70 - 130

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	1010	899.8		mg/Kg		89	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	56.3	*1	1010	1102		mg/Kg		103	70 - 130	1	20

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 Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/07/23 22:59	1

Lab Sample ID: LCS 880-66491/2-A
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	263.2		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-66491/3-A
Matrix: Solid
Analysis Batch: 66492

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	264.1		mg/Kg		106	90 - 110	0	20

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

QC Sample Results

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

Job ID: 890-5563-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-5563-21 MSD
Matrix: Solid
Analysis Batch: 66512

Client Sample ID: FS17
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	127		250	374.8		mg/Kg		99	90 - 110	2	20

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

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	

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	

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	

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	

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

QC Association Summary

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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

Lab Chronicle

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

Client Sample ID: FS01
Lab Sample ID: 890-5563-1
Date Collected: 11/01/23 09:20
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 13:27	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:15	CH	EET MID

Client Sample ID: FS02
Lab Sample ID: 890-5563-2
Date Collected: 11/01/23 09:25
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 13:49	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:30	CH	EET MID

Client Sample ID: FS03
Lab Sample ID: 890-5563-3
Date Collected: 11/01/23 09:30
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 22:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 22:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 14:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 14:11	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/07/23 23:36	CH	EET MID

Client Sample ID: FS04
Lab Sample ID: 890-5563-4
Date Collected: 11/01/23 09:35
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/07/23 23:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/07/23 23:05	SM	EET MID

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

Lab Chronicle

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

Client Sample ID: FS07
Lab Sample ID: 890-5563-7
Date Collected: 11/01/23 09:50
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:07	CH	EET MID

Client Sample ID: FS08
Lab Sample ID: 890-5563-8
Date Collected: 11/01/23 09:55
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 00:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 00:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 16:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 16:00	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:12	CH	EET MID

Client Sample ID: SW01
Lab Sample ID: 890-5563-9
Date Collected: 11/01/23 10:20
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 00:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 00:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 16:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 16:45	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:17	CH	EET MID

Client Sample ID: SW02
Lab Sample ID: 890-5563-10
Date Collected: 11/01/23 10:30
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 01:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 01:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:08	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:22	CH	EET MID

Lab Chronicle

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

Client Sample ID: SW03
Lab Sample ID: 890-5563-11
Date Collected: 11/01/23 10:40
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 02:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 02:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:30	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:28	CH	EET MID

Client Sample ID: SW04
Lab Sample ID: 890-5563-12
Date Collected: 11/01/23 10:50
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 02:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 02:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 17:53	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 17:53	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:43	CH	EET MID

Client Sample ID: FS09
Lab Sample ID: 890-5563-13
Date Collected: 11/02/23 11:30
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 03:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 03:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 18:14	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	66313	11/06/23 16:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66344	11/07/23 18:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66491	11/07/23 09:58	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66492	11/08/23 00:48	CH	EET MID

Client Sample ID: FS10
Lab Sample ID: 890-5563-14
Date Collected: 11/02/23 11:35
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	66320	11/06/23 17:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66350	11/08/23 03:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/08/23 03:31	SM	EET MID

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

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

Lab Chronicle

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

Client Sample ID: FS17
Lab Sample ID: 890-5563-21
Date Collected: 11/02/23 12:50
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	66435	11/08/23 12:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 02:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 02:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 13:27	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:22	CH	EET MID

Client Sample ID: FS18
Lab Sample ID: 890-5563-22
Date Collected: 11/02/23 12:55
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	66435	11/08/23 12:02	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 02:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 02:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 13:49	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:38	CH	EET MID

Client Sample ID: FS19
Lab Sample ID: 890-5563-23
Date Collected: 11/02/23 13:00
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	66435	11/08/23 12:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 03:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 03:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			66516	11/07/23 14:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	66315	11/06/23 16:30	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66346	11/07/23 14:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	66356	11/07/23 11:35	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66512	11/08/23 08:43	CH	EET MID

Client Sample ID: SW05
Lab Sample ID: 890-5563-24
Date Collected: 11/02/23 14:00
Matrix: Solid
Date Received: 11/03/23 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	66435	11/08/23 12:02	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66703	11/12/23 03:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66531	11/12/23 03:30	SM	EET MID

Lab Chronicle

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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

Accreditation/Certification Summary

Client: Ensolum
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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
Job ID: 890-5563-1
Project/Site: Hat Mesa 32-2

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

Chain of Custody

eurofins | Environment Testing | Xenco

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

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	☑ Routine ☐ Rush
Project Number:	03C1558249	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.4
Total Containers:		Corrected Temperature:	1.2

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2S0_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
~~NaOH+Ascorbic Acid: SAPC~~

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
FS01	S	11/1/23	920	4	C	1		✓	✓	✓
FS02			925			1		✓	✓	✓
FS03			930			1		✓	✓	✓
FS04			935			1		✓	✓	✓
FS05			940			1		✓	✓	✓
FS06			945			1		✓	✓	✓
FS07			950			1		✓	✓	✓
FS08			955	↓		1		✓	✓	✓
SW01			1020	0-4		1		✓	✓	✓
SW02		↓	1030	0-4	↓	1		✓	✓	✓

890-5563 Chain of Custody

Sample Comments

Incident ID:
nAPP2316046257
Cost Center:
1148831001
AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		15:28 11/2	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Chain of Custody

eurofins | Environment Testing | Xenco

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

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	☑ Routine ☐ Rush
Project Number:	03C1558249	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	
Total Containers:		Corrected Temperature:	

Preservative Codes
None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
SW03	S	11/1/23	1040	0-4	C	1				
SW04			1050	0-4	C	1				
FS09		11/2/23	1130	4		1				
FS10			1135	4		1				
FS11			1140	4		1				
FS12			1225	3		1				
FS13			1230			1				
FS14			1235			1				
FS15			1240			1				
FS16			1245			1				

Sample Comments
Incident ID: nAPP2316046257
Cost Center: 1148831001
AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		15:20 11/2	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Chain of Custody

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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 3 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	☑ Routine ☐ Rush
Project Number:	03C1558249	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	
Total Containers:		Corrected Temperature:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
FS17	S	11/2/23	1250	3	C	1				
FS18	↓	↓	1255	3	↓	1				
FS19	↓	↓	100	3	↓	1				
SW05	↓	↓	140	0-3	↓	1				

CW

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID:
nAPP2316046257

Cost Center:
1148831001

AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		16:28 11/2	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5563-1
SDG Number:

Login Number: 5563
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5563-1
SDG Number:

Login Number: 5563
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 11/06/23 01:01 PM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 11/13/2023 1:58:22 PM

JOB DESCRIPTION

Hat Mesa 32-2
SDG NUMBER 32.53601,-103,688

JOB NUMBER

890-5567-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization

Generated
11/13/2023 1:58:22 PM

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

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

Laboratory Job ID: 890-5567-1
SDG: 32.53601,-103,688

Table of Contents

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.

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

Date Collected: 11/03/23 08:45
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		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
OII 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

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

Lab Sample ID: 890-5567-2
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		11/07/23 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*

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

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

Lab Sample ID: 890-5567-2
Matrix: Solid

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
OII 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

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

Lab Sample ID: 890-5567-3
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		11/07/23 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

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

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
OII 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

Date Collected: 11/03/23 09:30
Date Received: 11/03/23 14:50

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

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
OII 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

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

Lab Sample ID: 890-5567-7
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		11/07/23 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

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

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

Date Collected: 11/03/23 10:55
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-9
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		11/07/23 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
OII 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

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

Lab Sample ID: 890-5567-10
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 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*

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
Matrix: Solid
Date Collected: 11/03/23 11:00
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
OII 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
Matrix: Solid
Date Collected: 11/03/23 11:45
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

Client Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS30

Lab Sample ID: 890-5567-11
Matrix: Solid
Date Collected: 11/03/23 11:45
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
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		11/07/23 17:44	11/08/23 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*11/07/23 17:44*	*11/08/23 14:45*	*1*
o-Terphenyl	*121*		*70 - 130*	*11/07/23 17:44*	*11/08/23 14:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**362**		5.05		mg/Kg			11/08/23 13:14	1

Client Sample ID: FS31

Lab Sample ID: 890-5567-12
Matrix: Solid
Date Collected: 11/03/23 11:10
Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:52	11/11/23 03:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/07/23 15:52	11/11/23 03:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:52	11/11/23 03:07	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/07/23 15:52	11/11/23 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*11/07/23 15:52*	*11/11/23 03:07*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*11/07/23 15:52*	*11/11/23 03:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/11/23 03:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/08/23 15:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		11/07/23 17:44	11/08/23 15:06	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/07/23 17:44	11/08/23 15:06	1
OII 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

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

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

Lab Sample ID: 890-5567-13
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		11/07/23 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
OII 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

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

Lab Sample ID: 890-5567-14
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		11/07/23 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*

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

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

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

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
OII 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

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

Lab Sample ID: 890-5567-15
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 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

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

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

Lab Sample ID: 890-5567-15
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)	<50.1	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

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

Lab Sample ID: 890-5567-16
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		11/07/23 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
OII 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

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
Matrix: Solid
Date Collected: 11/03/23 12:35
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
OII 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
Matrix: Solid
Date Collected: 11/03/23 10:10
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*

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

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

Lab Sample ID: 890-5567-18
Matrix: Solid

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
OII 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

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

Lab Sample ID: 890-5567-19
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 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

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

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

Lab Sample ID: 890-5567-19
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 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

Date Collected: 11/03/23 13:00
Date Received: 11/03/23 14:50

Lab Sample ID: 890-5567-20
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 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
OII 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

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
OII 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

Lab Sample ID: 890-5567-22
Matrix: Solid
Date Collected: 11/03/23 13:30
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
OII 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
Matrix: Solid
Date Collected: 11/03/23 13:35
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

Client Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS37

Lab Sample ID: 890-5567-23
Matrix: Solid
Date Collected: 11/03/23 13:35
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
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

Lab Sample ID: 890-5567-24
Matrix: Solid
Date Collected: 11/03/23 14:00
Date Received: 11/03/23 14:50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/08/23 11:51	11/12/23 01:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/08/23 11:51	11/12/23 01:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/08/23 11:51	11/12/23 01:45	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/08/23 11:51	11/12/23 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*11/08/23 11:51*	*11/12/23 01:45*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*11/08/23 11:51*	*11/12/23 01:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/12/23 01:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/08/23 12:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		11/07/23 17:47	11/08/23 12:11	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/07/23 17:47	11/08/23 12:11	1
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

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 (70-130)	DFBZ1 (70-130)
890-5567-1	FS20	75	101
890-5567-1 MS	FS20	115	105
890-5567-1 MSD	FS20	117	98
890-5567-2	FS21	88	77
890-5567-3	FS22	82	95
890-5567-4	FS23	92	84
890-5567-5	FS24	90	90
890-5567-6	FS25	91	70
890-5567-7	FS26	88	83
890-5567-8	FS27	89	89
890-5567-9	FS28	90	85
890-5567-10	FS29	87	79
890-5567-11	FS30	77	99
890-5567-12	FS31	90	79
890-5567-13	FS32	79	98
890-5567-14	FS33	89	80
890-5567-15	FS34	96	85
890-5567-16	FS35	92	85
890-5567-17	FS36	94	78
890-5567-18	SW06	90	78
890-5567-19	SW07	97	79
890-5567-20	SW08	94	66 S1-
890-5567-21	SW09	83	105
890-5567-21 MS	SW09	99	108
890-5567-21 MSD	SW09	120	103
890-5567-22	SW10	99	113
890-5567-23	FS37	104	105
890-5567-24	FS38	108	116
LCS 880-66433/1-A	Lab Control Sample	119	113
LCS 880-66532/1-A	Lab Control Sample	103	103
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 (70-130)	OTPH1 (70-130)
890-5567-1	FS20	99	105
890-5567-2	FS21	99	104
890-5567-3	FS22	149 S1+	131 S1+

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-5567-3 MS	FS22	151 S1+	124
890-5567-3 MSD	FS22	151 S1+	122
890-5567-4	FS23	181 S1+	155 S1+
890-5567-5	FS24	141 S1+	125
890-5567-6	FS25	156 S1+	137 S1+
890-5567-7	FS26	146 S1+	129
890-5567-8	FS27	159 S1+	138 S1+
890-5567-9	FS28	155 S1+	139 S1+
890-5567-10	FS29	150 S1+	132 S1+
890-5567-11	FS30	138 S1+	121
890-5567-12	FS31	158 S1+	143 S1+
890-5567-13	FS32	167 S1+	145 S1+
890-5567-14	FS33	153 S1+	137 S1+
890-5567-15	FS34	156 S1+	138 S1+
890-5567-16	FS35	176 S1+	153 S1+
890-5567-17	FS36	168 S1+	151 S1+
890-5567-18	SW06	188 S1+	162 S1+
890-5567-19	SW07	140 S1+	128
890-5567-20	SW08	153 S1+	136 S1+
890-5567-21	SW09	147 S1+	133 S1+
890-5567-22	SW10	198 S1+	177 S1+
890-5567-23	FS37	136 S1+	145 S1+
890-5567-23 MS	FS37	168 S1+	162 S1+
890-5567-23 MSD	FS37	145 S1+	140 S1+
890-5567-24	FS38	160 S1+	174 S1+
890-5568-A-12-F MS	Matrix Spike	105	105
890-5568-A-12-G MSD	Matrix Spike Duplicate	109	106
LCS 880-66452/2-A	Lab Control Sample	88	109
LCS 880-66453/2-A	Lab Control Sample	96	100
LCS 880-66454/2-A	Lab Control Sample	80	91
LCSD 880-66452/3-A	Lab Control Sample Dup	91	99
LCSD 880-66453/3-A	Lab Control Sample Dup	93	95
LCSD 880-66454/3-A	Lab Control Sample Dup	78	88
MB 880-66452/1-A	Method Blank	166 S1+	179 S1+
MB 880-66453/1-A	Method Blank	233 S1+	214 S1+
MB 880-66454/1-A	Method Blank	202 S1+	227 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-66374/5-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66374

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 13:38	11/11/23 12:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/07/23 13:38	11/11/23 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*11/07/23 13:38*	*11/11/23 12:36*	*1*
1,4-Difluorobenzene (Surr)	*148*	*S1+*	*70 - 130*	*11/07/23 13:38*	*11/11/23 12:36*	*1*

Lab Sample ID: MB 880-66433/5-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66433

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:52	11/10/23 21:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/07/23 15:52	11/10/23 21:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/07/23 15:52	11/10/23 21:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/07/23 15:52	11/10/23 21:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*11/07/23 15:52*	*11/10/23 21:57*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*11/07/23 15:52*	*11/10/23 21:57*	*1*

Lab Sample ID: LCS 880-66433/1-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66433

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1044		mg/Kg		104	70 - 130		
Toluene			0.100	0.09487		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.1009		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2140		mg/Kg		107	70 - 130		
o-Xylene			0.100	0.1033		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 880-66433/2-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1053		mg/Kg		105	70 - 130	1	35

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 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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-5567-1 MS
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: FS20
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
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 %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-5567-1 MSD
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: FS20
Prep Type: Total/NA
Prep Batch: 66433

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec 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

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 880-66532/5-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66532

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
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

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 Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
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 %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*11/08/23 11:51*	*11/12/23 00:15*	*1*
1,4-Difluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*11/08/23 11:51*	*11/12/23 00:15*	*1*

Lab Sample ID: LCS 880-66532/1-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66532

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09843		mg/Kg		98	70 - 130		
Toluene			0.100	0.08510		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.07552		mg/Kg		76	70 - 130		
m-Xylene & p-Xylene			0.200	0.1826		mg/Kg		91	70 - 130		
o-Xylene			0.100	0.09127		mg/Kg		91	70 - 130		

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

Lab Sample ID: LCSD 880-66532/2-A
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66532

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

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

QC Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5567-21 MS
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: SW09
Prep Type: Total/NA
Prep Batch: 66532

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 890-5567-21 MSD
Matrix: Solid
Analysis Batch: 66684

Client Sample ID: SW09
Prep Type: Total/NA
Prep Batch: 66532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.1044		mg/Kg		105	70 - 130	10	35
Toluene	<0.00199	U	0.0990	0.08792		mg/Kg		89	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.0990	0.08667		mg/Kg		88	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.2054		mg/Kg		104	70 - 130	5	35
o-Xylene	<0.00199	U	0.0990	0.09873		mg/Kg		100	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 880-66611/5-A
Matrix: Solid
Analysis Batch: 66683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66611

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/23 11:14	11/10/23 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/09/23 11:14	11/10/23 11:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/23 11:14	11/10/23 11:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/09/23 11:14	11/10/23 11:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*11/09/23 11:14*	*11/10/23 11:00*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/09/23 11:14*	*11/10/23 11:00*	*1*

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

Lab Sample ID: MB 880-66452/1-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 66452

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/07/23 17:39	11/08/23 07:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/07/23 17:39	11/08/23 07:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/07/23 17:39	11/08/23 07:47	1

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 %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	166	S1+	70 - 130	11/07/23 17:39	11/08/23 07:47	1
o-Terphenyl	179	S1+	70 - 130	11/07/23 17:39	11/08/23 07:47	1

Lab Sample ID: LCS 880-66452/2-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66452

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	862.5		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	908.3		mg/Kg		91	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-66452/3-A
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66452

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	963.0		mg/Kg		96	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	918.2		mg/Kg		92	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-5568-A-12-F MS
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66452

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	993	771.3		mg/Kg		75	70 - 130		
Diesel Range Organics (Over C10-C28)	65.5		993	835.7		mg/Kg		78	70 - 130		

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

QC Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5568-A-12-G MSD
Matrix: Solid
Analysis Batch: 66469

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66452

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	993	780.2		mg/Kg		76	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	65.5		993	875.3		mg/Kg		82	70 - 130	5	20

Surrogate	*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
OII 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

QC Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: LCSD 880-66453/3-A
Matrix: Solid
Analysis Batch: 66473

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66453

Surrogate	*LCSD %Recovery*	*LCSD 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

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	990	1226		mg/Kg		121	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	990	1209		mg/Kg		120	70 - 130

Surrogate	*MS %Recovery*	*MS 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

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	<49.6	U	990	1175		mg/Kg		115	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.6	U	990	1202		mg/Kg		120	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD 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

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 17:47	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
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/07/23 17:47	11/08/23 08:27	1

Surrogate	*MB %Recovery*	*MB 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*

QC Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: LCS 880-66454/2-A
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 66454

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	961.0		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	762.3		mg/Kg		76	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*80*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: LCSD 880-66454/3-A
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 66454

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Lab Sample ID: 890-5567-23 MS
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	1010	1157		mg/Kg		112	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.5	U	1010	1190		mg/Kg		115	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*168*	*S1+*	*70 - 130*
o-Terphenyl	*162*	*S1+*	*70 - 130*

Lab Sample ID: 890-5567-23 MSD
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*145*	*S1+*	*70 - 130*

QC Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

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

Lab Sample ID: 890-5567-23 MSD
Matrix: Solid
Analysis Batch: 66475

Client Sample ID: FS37
Prep Type: Total/NA
Prep Batch: 66454

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	140	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66337/1-A
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/08/23 15:02	1

Lab Sample ID: LCS 880-66337/2-A
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.8		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-66337/3-A
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	258.1		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5564-A-22-C MS
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	399	F1	249	596.4	F1	mg/Kg		79	90 - 110		

Lab Sample ID: 890-5564-A-22-F MSD
Matrix: Solid
Analysis Batch: 66518

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

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

Lab Sample ID: MB 880-66339/1-A
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/08/23 18:19	1

QC Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-66339/2-A
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	258.2		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-66339/3-A
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	258.3		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5567-5 MS
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: FS24
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	439		251	706.2		mg/Kg		107	90 - 110		

Lab Sample ID: 890-5567-5 MSD
Matrix: Solid
Analysis Batch: 66519

Client Sample ID: FS24
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	439		251	706.2		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-66380/1-A
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/08/23 11:39	1

Lab Sample ID: LCS 880-66380/2-A
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.6		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-66380/3-A
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	258.2		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5567-14 MS
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: FS33
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	92.4		250	353.2		mg/Kg		105	90 - 110		

QC Sample Results

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-5567-14 MSD
Matrix: Solid
Analysis Batch: 66529

Client Sample ID: FS33
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	92.4		250	354.0		mg/Kg		105	90 - 110	0	20

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

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	

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	

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	

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

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

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

Lab Chronicle

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS30

Lab Sample ID: 890-5567-11

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 02:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 02:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 14:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 14:45	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:14	CH	EET MID

Client Sample ID: FS31

Lab Sample ID: 890-5567-12

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 15:06	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 15:06	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:20	CH	EET MID

Client Sample ID: FS32

Lab Sample ID: 890-5567-13

Date Collected: 11/03/23 11:15
Matrix: Solid
Date Received: 11/03/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 15:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 15:51	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	66380	11/07/23 14:07	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66529	11/08/23 13:25	CH	EET MID

Client Sample ID: FS33

Lab Sample ID: 890-5567-14

Date Collected: 11/03/23 11:20
Matrix: Solid
Date Received: 11/03/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 03:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 03:49	SM	EET MID

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

Lab Chronicle

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

Job ID: 890-5567-1
SDG: 32.53601,-103,688

Client Sample ID: FS36

Lab Sample ID: 890-5567-17
Matrix: Solid
Date Collected: 11/03/23 12:35
Date Received: 11/03/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:42	CH	EET MID

Client Sample ID: SW06

Lab Sample ID: 890-5567-18
Matrix: Solid
Date Collected: 11/03/23 10:10
Date Received: 11/03/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 17:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 17:42	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:47	CH	EET MID

Client Sample ID: SW07

Lab Sample ID: 890-5567-19
Matrix: Solid
Date Collected: 11/03/23 11:35
Date Received: 11/03/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 18:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 18:05	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 15:53	CH	EET MID

Client Sample ID: SW08

Lab Sample ID: 890-5567-20
Matrix: Solid
Date Collected: 11/03/23 13:00
Date Received: 11/03/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	66433	11/07/23 15:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	66683	11/11/23 05:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			66857	11/11/23 05:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			66583	11/08/23 18:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	66453	11/07/23 17:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	66473	11/08/23 18:27	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	66337	11/06/23 20:19	CH	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	66518	11/08/23 16:10	CH	EET MID

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

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

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Chain of Custody

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

Work Order No:

www.xenco.com Page 1 of 3

Project Manager:	Ben Belill	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:	bbelill@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	☑ Routine ☐ Rush
Project Number:	03C1558249	Due Date:	
Project Location:	32.53601, -103.688	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Meredith Roberts		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TH#007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	3.2
Total Containers:		Corrected Temperature:	3.0

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	Chlorides	TPH
FS20	S	11/3/23	0845	3'	C	1		X	X	X
FS21			0850	3.5'						
FS22			0855	3'						
FS23			0900							
FS24			0925							
FS25			0930							
FS26			0915							
FS27			0920							
FS28			1055							
FS29			1100							

890-5567 Chain of Custody

Sample Comments

Incident #:
nAPP2316046257

Cost Center:
1148831001

mroberts@ensolum.com

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		14:49 11/3			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No:

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Project Manager:	Ben Belill	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:	bbelill@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	☑ Routine ☐ Rush
Project Number:	03C1558249	Due Date:	
Project Location:	32.53601, -103.688	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Meredith Roberts		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	
Total Containers:		Corrected Temperature:	

Preservative Codes
None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX	Chlorides	TPH
FS30	S	11/3/23	3'	1145	C	1		X	X	X
FS31				1110						
FS32				1115						
FS33				1120						
FS34				1150						
FS35				1130						
FS36			↓	1235						
SW06			0-3.5'	1000						
SW07			0-3'	1010						
SW08	↓	↓	0-3'	1135	↓	↓		↓	↓	↓

Sample Comments
Cost Center: 1148831001
Incident #: nAPP2316046257
mroberts@ensolum.com

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		14:49 10/3	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No:

www.xenco.com Page 3 of 3

Project Manager:	Ben Belill	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:	bbelill@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	
Project Number:	03C1558249	☑ Routine ☐ Rush	
Project Location:	32.53601, -103.688	Due Date:	
Sampler's Name:	Meredith Roberts	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No		Thermometer ID:	
Cooler Custody Seals:	Yes No N/A		Correction Factor:	
Sample Custody Seals:	Yes No N/A		Temperature Reading:	
Total Containers:			Corrected Temperature:	

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	Chlorides	TPH
SW09	S	11/3/23	1300	0-3'	C	1		X	X	X
SW10	S	11/3/23	1140	0-3'	C	1		X	X	X
FS37	S	11/3/23	1330	3'	C	1		X	X	X
FS38	S	11/3/23	1335	3'	C	1		X	X	X

NM

Sample Comments

Incident #:
NAPP2316046257

Cost Center:
1148831001

mroberts@ensolum.com

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			14:49 10/			
3						
5				6		

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	

ENSOLUM

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/ocd

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 287965

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 287965
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan is approved as written. XTO has until June 10, 2024 to submit to OCD its appropriate or final remediation closure report.	3/11/2024