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	NAPP2204835360
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Adrian Baker	Contact Telephone 432-236-3808
Contact email adrian.baker@exxonmobil.com	Incident # *(assigned by OCD)*
Contact mailing address 6401 Holiday Hill Rd Bldg 5, Midland, Texas, 79707	

Location of Release Source

Latitude 32.25928 Longitude -103.83742
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Los Medanos	Site Type Tank Battery
Date Release Discovered 02/02/2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
K	36	25S	30E	Eddy

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)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 9.57	Volume Recovered (bbls) 4.10
	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 Corrosion caused a leak on the bulk separator water dump line. Free fluids were recovered with a vacuum truck. A third-party contractor has been retained for remediation purposes.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2204835360
District RP	
Facility ID	
Application ID	

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: Adrian Baker
Title: SSHE Coordinator
Signature:
Date: 2/17/22
email: adrian.baker@exxonmobil.com
Telephone: 432-236-3808

OCD Only

Received by: Ramona Marcus
Date: 2/18/2022

Location:	Los Dos Medanos Battery	
Spill Date:	2/2/2022	
Area 1		
Approximate Area =	12085.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	2.69	bbls
Area 2		
Approximate Area =	624.00	sq. ft.
Average Saturation (or depth) of spill =	2.00	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	6.88	bbls

TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**9.57**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**4.10**	**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

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 82304
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	2/18/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2204835360
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?	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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2204835360
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: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 05/03/2022

email: adrian.baker@exxonmobil.com Telephone: 432-263-3808

OCD Only

Received by: Date:

Incident ID	NAPP2204835360
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: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 5-3-2022

email: adrian.baker@exxonmobil.com Telephone: 432-236-3808

OCD Only

Received by: Date:

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

Signature: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2204835360
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: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 5-3-2022

email: adrian.baker@exxonmobil.com Telephone: 432-236-3808

OCD Only

Received by: Robert Hamlet Date: 6/27/2022

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

Signature: Robert Hamlet Date: 6/27/2022

ENSOLUM

May 3, 2022

District II
New Mexico Oil Conservation Division
811 S. First Street
Artesia, New Mexico 88210

Re: Remediation Work Plan
Los Medanos
Incident Number NAPP2204835360
Eddy 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 to document the site assessment and soil sampling activities completed to date and propose a work plan to address the impacted soil identified at the Los Medanos tank battery (Site). The purpose of the site assessment and soil sampling activities was to delineate the lateral and vertical extent of impacted soil resulting from a release of produced water at the Site. The following Work Plan proposes to install a soil boring to investigate depth to water to confirm the Closure Criteria at the Site and excavate the impacted soil.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 36, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.25928° N, 103.83742° W) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On February 2, 2022, corrosion caused a leak on the bulk separator water dump line, which resulted in the release of 9.57 barrels (bbls) of produced water onto the well pad and into the adjacent pasture where fluids pooled. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 4.10 bbls of produced water were recovered. XTO reported the release to the NMOCD on a Release Notification Form C-141 (Form C-141) on February 17, 2022. The release was assigned Incident Number NAPP2204835360.

SITE CHARATERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) 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. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The nearest groundwater well with depth to groundwater data is United

States Geological Suvery (USGS) well 321544103515202 located approximately 1.6 miles west of the Site. The groundwater well has a reported depth to groundwater of 417 feet bgs and a total depth of 563 feet bgs. All wells used for depth to water determination are depicted on Figure 1 and the referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 2,133 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

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

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

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On April 13, 2022, Ensolum personnel completed a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations. Ten preliminary soil samples (SS01 through SS10) were collected within and around the release extent from a depth of 0.5 feet bgs. Preliminary soil samples SS01 through SS05 were collected within the release extent on pad, sample SS06 was collected within the pasture release area, and samples SS07 through SS10 were collected around the release extent to confirm the lateral exent. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

The preliminary 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 at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

On April 20, 2022 delineation activities were conducted at the Site to assess the vertical extent of impacted soil. Potholes PH01 through PH05 were advanced via track mounted backhoe within the release extent on pad at the locations of preliminary soil samples SS01 through SS05. Borehole BH01 was advanced via hand auger within the release extent in the pasture at the location of preliminary soil

sample SS06. The delineation potholes and borehole were advanced a depth of 4 feet bgs. Discrete delineation soil samples were collected from each pothole and borehole at depths ranging from 1-foot bgs to 4 feet bgs. Soil from the potholes and borehole was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes and borehole were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil samples were handled and analyzed as described above. The delineation soil sample locations are depicted on Figure 2.

LABORATORY ANALYTICAL RESULTS

Benzene, BTEX, TPH-GRO/TPH-DRO, and TPH concentrations were compliant with the most stringent Table 1 Closure Criteria in preliminary samples SS01 through SS10 and in all delineation soil samples from borehole BH01 and potholes PH01 through PH05. No hydrocarbon impacted soil was identified as a result of the release.

Laboratory analytical results for preliminary soil samples SS01 through SS05, collected within the release extent on pad, indicated that chloride concentrations exceeded the Site Closure Criteria. Laboratory analytical results for preliminary soil sample SS06, collected in the pasture, indicated that the chloride concentration was compliant with the reclamation standard. Laboratory analytical results for preliminary soil samples SS07 through SS10, collected around the release extent, indicated that chloride concentrations were compliant with the most stringent Table 1 Closure Criteria and successfully defined the lateral extent of the release.

Laboratory analytical results for the delineation soil samples collected from borehole BH01, advanced in the pasture at the location of preliminary soil sample SS06, indicated that chloride concentrations exceeded the reclamation standard at depths ranging from 1-foot to 4 feet bgs.

Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH05 at depths ranging from 1-foot to 4 feet bgs, indicated that chloride concentrations were compliant with most stringent Table 1 Closure Criteria and defined the vertical extent of the impacted soil on pad. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix D.

PROPOSED REMEDIATION WORK PLAN

In order to confirm depth to groundwater is greater than 100 feet bgs at the Site, XTO proposes to advance a soil boring to a depth of 105 feet bgs. The soil boring will be located within 0.5 miles of the Site and a field geologist will log and describe soils continuously. The soil boring will be left open for over 72 hours to allow for equilibration of groundwater levels within the temporary boring casing. After the 72-hour waiting period, depth to groundwater will be assessed and the soil boring will be backfilled following New Mexico Office of the State Engineer (NMOSE) approved procedures. A well record or soil boring log will be included in the follow up Closure Report.

Following confirmation of depth to groundwater, XTO will proceed with excavation of impacted soil on pad to below the established Site Closure Criteria and excavation in the pasture to below the reclamation standard in the top 4 feet. Based on the delineation soil sample analytical results and area of the release extent, an estimated 300 cubic yards of impacted soil will be excavated from the well pad and an estimated 60 cubic yards will be excavated from the adjacent pasture.

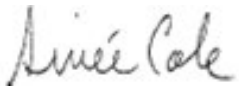
Due to the estimated 16,850 square foot size of the excavation, XTO requests a variance for frequency of excavation confirmation samples. XTO proposes the frequency of confirmation sampling for the

excavation floor to be decreased from every 200 square feet (approximately 85 samples) to every 500 square feet (approximately 35 samples). Each 5-point composite floor sample will represent a 500 square foot area. Sidewall samples in areas where the excavation is shallow (less than 1-foot bgs) will be incorporated into the floor sample aliquots. Sidewall samples in areas of the excavation in the pasture which are anticipated to be as deep as 4 feet bgs will be collected at a frequency of every 200 square feet (approximately 4 samples). The soil samples will be handled as described above and analyzed for chloride at Eurofins in Carlsbad, New Mexico. The soil samples will be analyzed for chloride only since no TPH concentrations were detected in any of the samples collected at the Site. The source of the release was produced water and chloride is the established contaminant of concern.

XTO will complete the excavation activities within 90 days of the date of approval of this Work Plan by the NMOCD. The depth to water soil boring will be completed as soon as possible following approval from the surface landowner, receipt of the NMOSE drilling permit, and scheduling with a driller.

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

Sincerely,
Ensolum, LLC



Tacoma Morrissey
Senior Geologist

Aimee Cole
Senior Managing Scientist

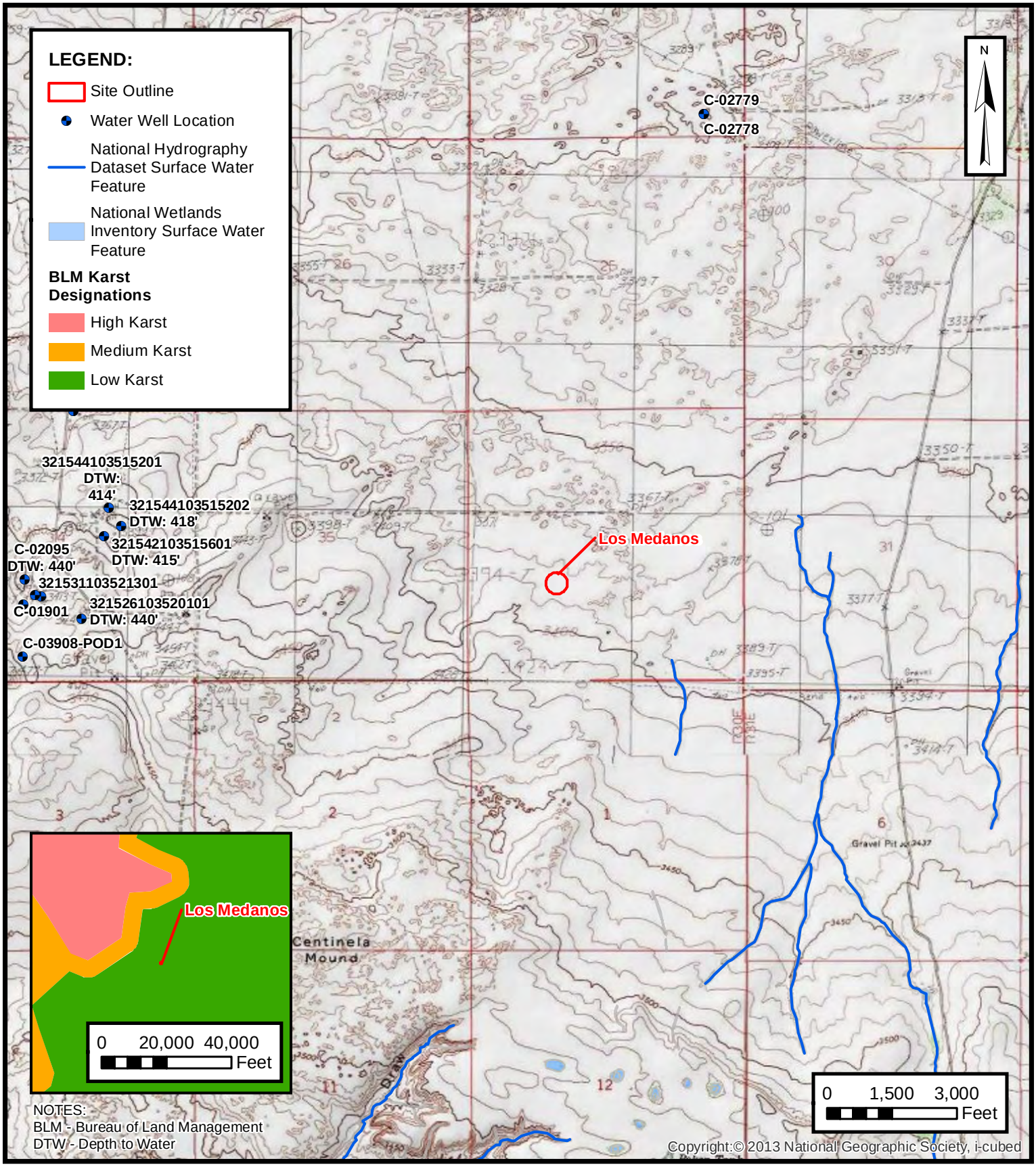
cc: Adrian Baker, XTO
New Mexico State Land Office

Appendices:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Lithologic / Soil Sampling Logs
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Notifications

ENSOLUM

FIGURES

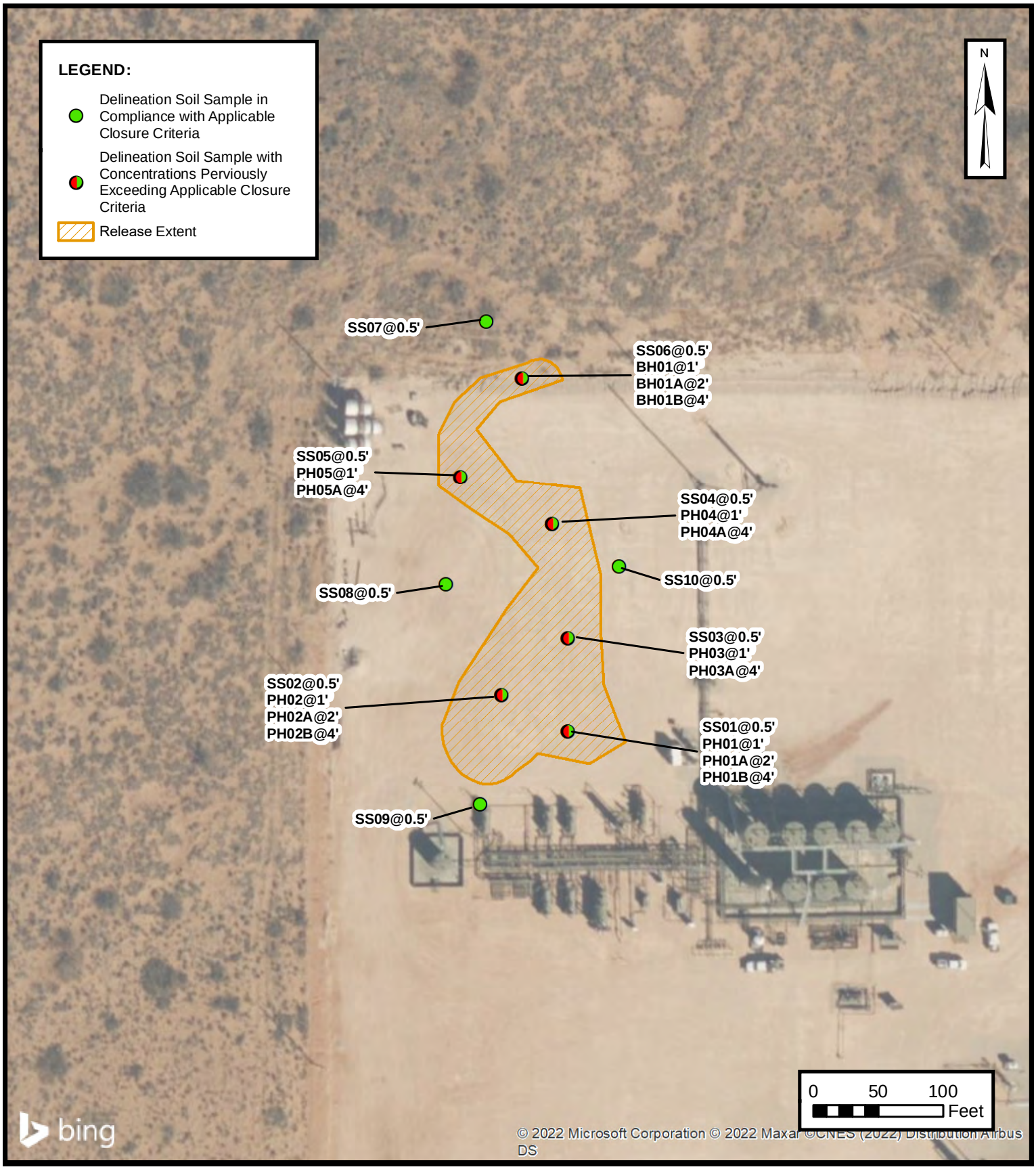


ENSOLUM
Environmental & Hydrogeologic Consultants

SITE RECEPTOR MAP

XTO ENERGY, INC
LOS MEDANOS
NAPP2204835360
Unit K, Sec 36, T25S, R30E
Eddy County, New Mexico

FIGURE
1



ENSOLUM
Environmental & Hydrogeologic Consultants

DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
LOS MEDANOS
NAPP2204835360
Unit K, Sec 36, T23S, R30E
Eddy County, New Mexico

FIGURE
2

ENSOLUM

TABLES

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Los Medanos
XTO Energy, Inc.
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Preliminary Soil Samples										
SS01	04/13/2022	0.5	<0.00200	0.0311	<50.0	<50.0	<50.0	<50.0	<50.0	**87,400**
SS02	04/13/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	**90,600**
SS03	04/13/2022	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	**23,200**
SS04	04/13/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	**40,600**
SS05	04/13/2022	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	**35,000**
SS06	04/13/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	529*
SS07	04/20/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	6.88
SS08	04/20/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	215
SS09	04/20/2022	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	157
SS10	04/20/2022	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	97.1
Delineation Soil Samples										
BH01	04/20/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	**1,880***
BH01A	04/20/2022	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	**1,290***
BH01B	04/20/2022	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	3,320
PH01	04/20/2022	1	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	124
PH01A	04/20/2022	2	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	34.8
PH01B	04/20/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	<4.97
PH02	04/20/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	30.5
PH02A	04/20/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<4.95
PH02B	04/20/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<5.04
PH03	04/20/2022	1	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	28.6
PH03A	04/20/2022	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	8.6
PH04	04/20/2022	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	36.0
PH04A	04/20/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	<4.96
PH05	04/20/2022	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	50.8
PH05A	04/20/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	29.4

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 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

ENSOLUM

APPENDIX A

Referenced Well Records

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =

- 321544103515202

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

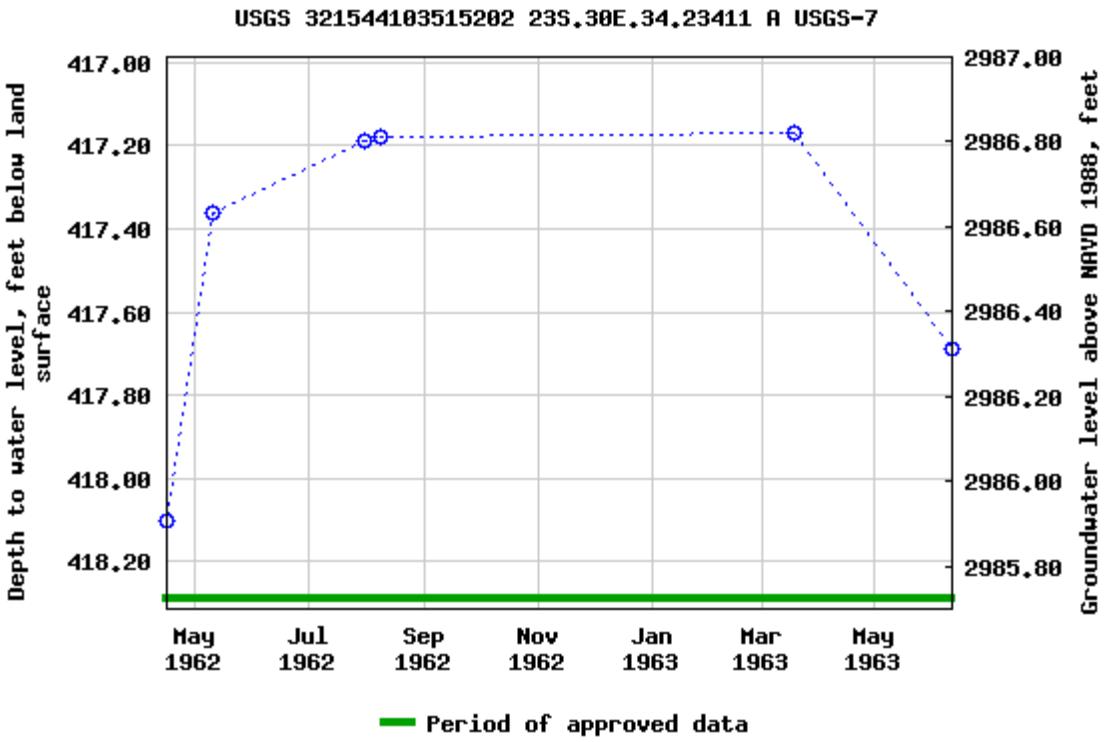
USGS 321544103515202 23S.30E.34.23411 A USGS-7

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°15'44", Longitude 103°51'52" NAD27
Land-surface elevation 3,404 feet above NAVD88
The depth of the well is 563 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2022-04-13 14:20:28 EDT
0.55 0.49 nadww01

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02095		2	3	34	23S	30E	606337	3569759*

Driller License: **Driller Company:**

Driller Name: DEPT. OF ENGERY

Drill Start Date:		**Drill Finish Date:**	08/31/1960	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	100 GPM
Casing Size:	12.75	**Depth Well:**	554 feet	**Depth Water:**	440 feet

***UTM location was derived from PLSS - see Help**

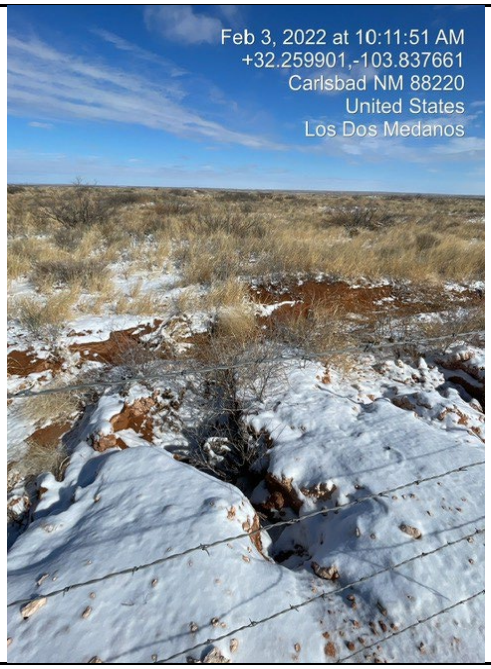
ENSOLUM

APPENDIX B

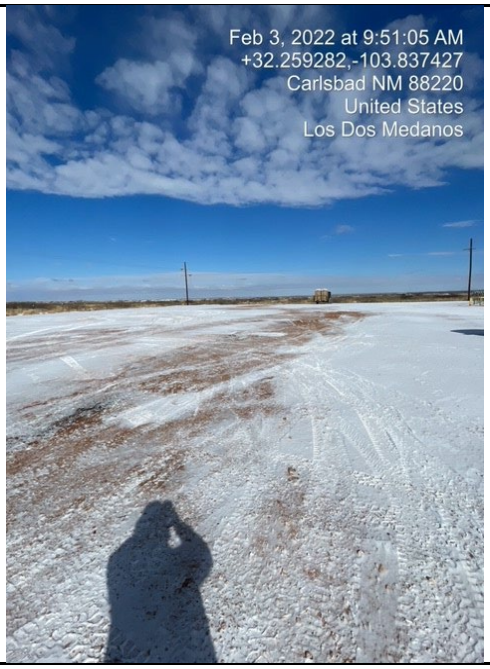
Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc.
Los Medanos
Incident Number NAPP2204835360

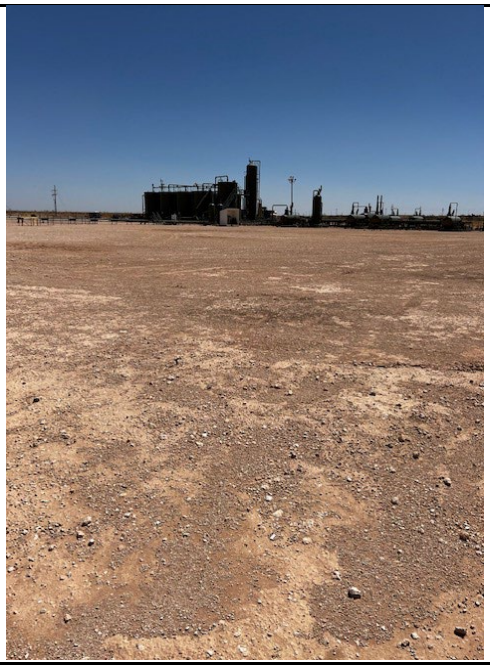


Photograph 1
Date: February 3, 2022
Description: Photo of visible staining from release.



Photograph 2
Date: February 3, 2022
Description: Photo of visible staining from release.

Photograph 3
Date: April 13, 2022
Description: Photo of extent taken during initial site visit.



Photograph 4
Date: April 13, 2022
Description: Photo of extent taken during initial site visit.

ENSOLUM

APPENDIX C

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: **BH01**	Date: **4/20/2022**
	Site Name: **Los Medanos**	
	Incident Number: **NAPP2204835360**	
	Job Number: 03E1558007	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: **Backhoe**
Coordinates: **32.259995, -103.837654**	Hole Diameter: NA	Total Depth: **4'**

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. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	2,441.6	1.3	N	BH01	1	1	SP	SANDSTONE, reddish brown, abundant silt, no stain, no odor.
D	1,741.6	2.3	N	BH01A	2	2	SP	SAA
D	2,800	1.7	N			3	SP	SAA
D	3,466.4	2.2	N	BH01B	4	4	SP	SAA, some caliche gravel.

TD @ 4 feet bgs

ENSOLUM	Sample Name: **PH01**	Date: **4/20/2022**
	Site Name: **Los Medanos**	
	Incident Number: **NAPP2204835360**	
	Job Number: 03E1558007	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: **Backhoe**
Coordinates: **32.259264, -103.837494**	Hole Diameter: NA	Total Depth: **4'**

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. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	168	1.0	N	PH01	1	1	SP	SANDSTONE, reddish brown, abundant silt and caliche grains, no stain, no odor.
D	<168	1.7	N	PH01A	2	2	SP	SAA, medium to fine grained.
D	<168	1.4	N			3	SP	SAA
D	<168	1.1	N	PH01B	4	4	SP	SAA

TD @ 4 feet bgs

ENSOLUM	Sample Name: **PH02**	Date: **4/20/2022**
	Site Name: **Los Medanos**	
	Incident Number: **NAPP2204835360**	
	Job Number: 03E1558007	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: **Backhoe**
Coordinates: **32.259354, -103.83761**	Hole Diameter: NA	Total Depth: **4'**

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. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	<168	2.6	N	PH02	1	1	SP	SANDSTONE, reddish brown, abundand silt and caliche grains, no stain, no odor.
D	<168	3.0	N	PH02A	2	2	SP	SAA, no caliche grains, medium to fine grained.
D	<168	1.7	N			3	SP	SAA
D	<168	1.8	N	PH02B	4	4	SP	SAA

TD @ 4 feet bgs

ENSOLUM	Sample Name: **PH03**	Date: **4/20/2022**
	Site Name: **Los Medanos**	
	Incident Number: **NAPP2204835360**	
	Job Number: 03E1558007	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: **Backhoe**
Coordinates: **32.259489, -103.837511**	Hole Diameter: NA	Total Depth: **4'**

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. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	<168	6.1	N	PH03	1	1	SP	SANDSTONE, reddish brown, abundant silt and caliche grains, no stain, no odor.
D	<168	4.7	N	PH03A	2	2	SP	SAA, no caliche grains, medium to fine grained.
D	<168	4.6	N			3	SP	SAA
D	<168	2.8	N	PH03B	4	4	SP	SAA

TD @ 4 feet bgs

ENSOLUM	Sample Name: **PH04**	Date: **4/20/2022**
	Site Name: **Los Medanos**	
	Incident Number: **NAPP2204835360**	
	Job Number: 03E1558007	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: **Backhoe**
Coordinates: **32.259681, -103.837576**	Hole Diameter: NA	Total Depth: **4'**

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. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	<168	3.8	N	PH04	1	1	SP	SANDSTONE, reddish brown, abundant silt and caliche grains, no stain, no odor.
D	<168	2.4	N			2	SP	SAA, no caliche grains, medium to fine grain.
D	<168	1.2	N			3	SP	SAA
D	<168	1.3	N	PH04A	4	4	SP	SAA

TD @ 4 feet bgs

ENSOLUM

	Sample Name: **PH05**	Date: **4/20/2022**
	Site Name: **Los Medanos**	
	Incident Number: **NAPP2204835360**	
	Job Number: 03E1558007	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: **Backhoe**
Coordinates: **32.259816, -103.837711**	Hole Diameter: NA	Total Depth: **4'**

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. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	<168	2.7	N	PH05	1	1	SP	SANDSTONE, reddish brown, abundant silt and caliche grains, no stain, no odor.
D	<168	2.0	N			2	SP	SAA, no caliche grains, medium to fine grain.
D	<168	3.2	N			3	SP	SAA
D	<168	4.8	N	PH05A	4	4	SP	SAA

TD @ 4 feet bgs

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America

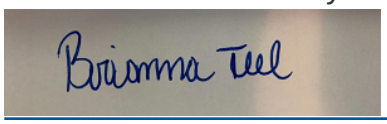
ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2197-1
Laboratory Sample Delivery Group: 03E1558007
Client Project/Site: Los Dos Medenos
Revision: 1

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey



Authorized for release by:
4/29/2022 5:06:21 PM
Brianna Teel, Project Manager
(432)704-5440
Brianna.Teel@et.eurofinsus.com

Designee for

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Los Dos Medenos

Laboratory Job ID: 890-2197-1
SDG: 03E1558007

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Qualifiers

GC VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Job ID: 890-2197-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2197-1

REVISION

The report being provided is a revision of the original report sent on 4/22/2022. The report (revision 1) is being revised due to Per client email, requesting we review all chloride data. Not matching field screenings.

Report revision history

Receipt
The samples were received on 4/18/2022 8:04 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 3.4°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-23784 and analytical batch 880-23768 were outside control limits. Sample matrix interference and/or non-homogeneity are 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: (LCS 880-23912/1-A) and (MB 880-23912/5-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
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 (MS) recoveries for preparation batch 880-24453 and analytical batch 880-24454 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.

Client Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Client Sample ID: SS01

Date Collected: 04/13/22 12:00
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Lab Sample ID: 890-2197-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/19/22 13:14	04/20/22 03:07	1
Toluene	**0.0202**		0.00200		mg/Kg		04/19/22 13:14	04/20/22 03:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/19/22 13:14	04/20/22 03:07	1
m-Xylene & p-Xylene	**0.0109**		0.00400		mg/Kg		04/19/22 13:14	04/20/22 03:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/19/22 13:14	04/20/22 03:07	1
Xylenes, Total	**0.0109**		0.00400		mg/Kg		04/19/22 13:14	04/20/22 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*04/19/22 13:14*	*04/20/22 03:07*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*04/19/22 13:14*	*04/20/22 03:07*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0311**		0.00400		mg/Kg			04/20/22 11:37	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/20/22 00:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/20/22 00:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/20/22 00:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*04/19/22 10:31*	*04/20/22 00:53*	*1*
o-Terphenyl	*113*		*70 - 130*	*04/19/22 10:31*	*04/20/22 00:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**87400**	**F1**	496		mg/Kg			04/29/22 11:48	100

Client Sample ID: SS02

Date Collected: 04/13/22 12:05
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Lab Sample ID: 890-2197-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/19/22 13:14	04/20/22 03:27	1
Toluene	**0.00377**		0.00201		mg/Kg		04/19/22 13:14	04/20/22 03:27	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/19/22 13:14	04/20/22 03:27	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/19/22 13:14	04/20/22 03:27	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/19/22 13:14	04/20/22 03:27	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/19/22 13:14	04/20/22 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*04/19/22 13:14*	*04/20/22 03:27*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Client Sample ID: SS02

Date Collected: 04/13/22 12:05
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Lab Sample ID: 890-2197-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/19/22 13:14*	*04/20/22 03:27*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/20/22 11:37	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/20/22 01:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/20/22 01:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/20/22 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*04/19/22 10:31*	*04/20/22 01:35*	*1*
o-Terphenyl	*91*		*70 - 130*	*04/19/22 10:31*	*04/20/22 01:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90600**		499	mg/Kg			04/29/22 12:07	100

Client Sample ID: SS03

Date Collected: 04/13/22 12:10
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Lab Sample ID: 890-2197-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/19/22 13:14	04/20/22 03:48	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/19/22 13:14	04/20/22 03:48	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/19/22 13:14	04/20/22 03:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		04/19/22 13:14	04/20/22 03:48	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/19/22 13:14	04/20/22 03:48	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		04/19/22 13:14	04/20/22 03:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*04/19/22 13:14*	*04/20/22 03:48*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/19/22 13:14*	*04/20/22 03:48*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			04/20/22 11:37	1

Method: 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			04/20/22 15:20	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Client Sample ID: SS03
Date Collected: 04/13/22 12:10
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Lab Sample ID: 890-2197-3
Matrix: Solid

Method: 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		04/19/22 10:31	04/20/22 01:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/19/22 10:31	04/20/22 01:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/19/22 10:31	04/20/22 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*04/19/22 10:31*	*04/20/22 01:56*	*1*
o-Terphenyl	*112*		*70 - 130*	*04/19/22 10:31*	*04/20/22 01:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23200**		249		mg/Kg			04/29/22 12:13	50

Client Sample ID: SS04
Date Collected: 04/13/22 12:15
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Lab Sample ID: 890-2197-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/19/22 13:14	04/20/22 04:08	1
Toluene	**0.00298**		0.00201		mg/Kg		04/19/22 13:14	04/20/22 04:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/19/22 13:14	04/20/22 04:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/19/22 13:14	04/20/22 04:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/19/22 13:14	04/20/22 04:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/19/22 13:14	04/20/22 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*04/19/22 13:14*	*04/20/22 04:08*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/19/22 13:14*	*04/20/22 04:08*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			04/20/22 11:37	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/20/22 02:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/20/22 02:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/20/22 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*04/19/22 10:31*	*04/20/22 02:17*	*1*
o-Terphenyl	*95*		*70 - 130*	*04/19/22 10:31*	*04/20/22 02:17*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Client Sample ID: SS04

Lab Sample ID: 890-2197-4
Matrix: Solid
Date Collected: 04/13/22 12:15
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40600**		250		mg/Kg			04/29/22 12:20	50

Client Sample ID: SS05

Lab Sample ID: 890-2197-5
Matrix: Solid
Date Collected: 04/13/22 12:20
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/19/22 17:00	04/20/22 11:59	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/19/22 17:00	04/20/22 11:59	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/19/22 17:00	04/20/22 11:59	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/19/22 17:00	04/20/22 11:59	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/19/22 17:00	04/20/22 11:59	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/19/22 17:00	04/20/22 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/19/22 17:00*	*04/20/22 11:59*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/19/22 17:00*	*04/20/22 11:59*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			04/20/22 11:37	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/20/22 02:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/20/22 02:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/20/22 02:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*04/19/22 10:31*	*04/20/22 02:38*	*1*
o-Terphenyl	*110*		*70 - 130*	*04/19/22 10:31*	*04/20/22 02:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35000**		249		mg/Kg			04/29/22 12:26	50

Client Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Client Sample ID: SS06
Date Collected: 04/13/22 12:25
Date Received: 04/18/22 08:04
Sample Depth: 0.5

Lab Sample ID: 890-2197-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 23:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 23:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 23:36	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/21/22 09:54	04/21/22 23:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 23:36	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/21/22 09:54	04/21/22 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*04/21/22 09:54*	*04/21/22 23:36*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*04/21/22 09:54*	*04/21/22 23:36*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/20/22 11:37	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/20/22 02:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/20/22 02:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/20/22 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*04/19/22 10:31*	*04/20/22 02:59*	*1*
o-Terphenyl	*91*		*70 - 130*	*04/19/22 10:31*	*04/20/22 02:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**529**		25.0		mg/Kg			04/29/22 12:45	5

Surrogate Summary

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-13710-A-10-E MS	Matrix Spike	86	106
880-13710-A-10-F MSD	Matrix Spike Duplicate	94	107
890-2195-A-1-B MS	Matrix Spike	24 S1-	11 S1-
890-2195-A-1-C MSD	Matrix Spike Duplicate	25 S1-	2 S1-
890-2197-1	SS01	82	82
890-2197-2	SS02	98	101
890-2197-3	SS03	110	108
890-2197-4	SS04	99	102
890-2197-5	SS05	113	101
890-2197-5 MS	SS05	104	103
890-2197-5 MSD	SS05	101	102
890-2197-6	SS06	81	98
LCS 880-23750/1-B	Lab Control Sample	99	101
LCS 880-23784/1-A	Lab Control Sample	95	103
LCS 880-23912/1-A	Lab Control Sample	82	10 S1-
LCSD 880-23750/2-B	Lab Control Sample Dup	103	103
LCSD 880-23784/2-A	Lab Control Sample Dup	94	103
LCSD 880-23912/2-A	Lab Control Sample Dup	82	100
MB 880-23750/5-B	Method Blank	101	92
MB 880-23779/5-A	Method Blank	97	102
MB 880-23784/5-A	Method Blank	96	102
MB 880-23912/5-A	Method Blank	64 S1-	89

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-13850-A-21-B MS	Matrix Spike	82	90
880-13850-A-21-C MSD	Matrix Spike Duplicate	77	81
890-2197-1	SS01	95	113
890-2197-2	SS02	78	91
890-2197-3	SS03	95	112
890-2197-4	SS04	82	95
890-2197-5	SS05	94	110
890-2197-6	SS06	79	91

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Surrogate Summary

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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	1CO2 (70-130)	OTPH2 (70-130)								
LCS 880-23780/2-A	Lab Control Sample	92	108								
LCSD 880-23780/3-A	Lab Control Sample Dup	100	116								
MB 880-23780/1-A	Method Blank	98	120								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23750/5-B
Matrix: Solid
Analysis Batch: 23819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23750

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/19/22 17:00	04/20/22 11:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/19/22 17:00	04/20/22 11:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/19/22 17:00	04/20/22 11:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/19/22 17:00	04/20/22 11:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/19/22 17:00	04/20/22 11:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/19/22 17:00	04/20/22 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*04/19/22 17:00*	*04/20/22 11:37*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*04/19/22 17:00*	*04/20/22 11:37*	*1*

Lab Sample ID: LCS 880-23750/1-B
Matrix: Solid
Analysis Batch: 23819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23750

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1169		mg/Kg		117	70 - 130		
Toluene			0.100	0.1265		mg/Kg		127	70 - 130		
Ethylbenzene			0.100	0.1142		mg/Kg		114	70 - 130		
m-Xylene & p-Xylene			0.200	0.2390		mg/Kg		119	70 - 130		
o-Xylene			0.100	0.1126		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-23750/2-B
Matrix: Solid
Analysis Batch: 23819

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23750

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1144		mg/Kg		114	70 - 130	2	35
Toluene			0.100	0.1246		mg/Kg		125	70 - 130	2	35
Ethylbenzene			0.100	0.1118		mg/Kg		112	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2343		mg/Kg		117	70 - 130	2	35
o-Xylene			0.100	0.1111		mg/Kg		111	70 - 130	1	35

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

Lab Sample ID: 890-2197-5 MS
Matrix: Solid
Analysis Batch: 23819

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 23750

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.100	0.1146		mg/Kg		114	70 - 130		
Toluene	<0.00202	U	0.100	0.1225		mg/Kg		122	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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

Lab Sample ID: 890-2197-5 MS
Matrix: Solid
Analysis Batch: 23819

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 23750

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.100	0.1095		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.201	0.2298		mg/Kg		114	70 - 130
o-Xylene	<0.00202	U	0.100	0.1089		mg/Kg		108	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2197-5 MSD
Matrix: Solid
Analysis Batch: 23819

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 23750

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	0.1280		mg/Kg		127	70 - 130	11	35
Toluene	<0.00202		0.0996	0.1162		mg/Kg		94	70 - 130	5	35
Ethylbenzene	<0.00202	U	0.0996	0.1045		mg/Kg		104	70 - 130	5	35
m-Xylene & p-Xylene	<0.00403		0.199	0.2200		mg/Kg		104	70 - 130	4	35
o-Xylene	<0.00202		0.0996	0.1046		mg/Kg		103	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 880-23779/5-A
Matrix: Solid
Analysis Batch: 23768

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23779

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/19/22 10:22	04/19/22 12:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/19/22 10:22	04/19/22 12:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/19/22 10:22	04/19/22 12:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/19/22 10:22	04/19/22 12:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/19/22 10:22	04/19/22 12:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/19/22 10:22	04/19/22 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*04/19/22 10:22*	*04/19/22 12:24*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/19/22 10:22*	*04/19/22 12:24*	*1*

Lab Sample ID: MB 880-23784/5-A
Matrix: Solid
Analysis Batch: 23768

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23784

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/19/22 13:14	04/20/22 00:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/19/22 13:14	04/20/22 00:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/19/22 13:14	04/20/22 00:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/19/22 13:14	04/20/22 00:35	1

QC Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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

Lab Sample ID: MB 880-23784/5-A
Matrix: Solid
Analysis Batch: 23768

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23784

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/19/22 13:14	04/20/22 00:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/19/22 13:14	04/20/22 00:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*04/19/22 13:14*	*04/20/22 00:35*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/19/22 13:14*	*04/20/22 00:35*	*1*

Lab Sample ID: LCS 880-23784/1-A
Matrix: Solid
Analysis Batch: 23768

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23784

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1185		mg/Kg		118	70 - 130		
Toluene			0.100	0.1239		mg/Kg		124	70 - 130		
Ethylbenzene			0.100	0.1119		mg/Kg		112	70 - 130		
m-Xylene & p-Xylene			0.200	0.2319		mg/Kg		116	70 - 130		
o-Xylene			0.100	0.1098		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-23784/2-A
Matrix: Solid
Analysis Batch: 23768

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23784

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1199		mg/Kg		120	70 - 130	1	35
Toluene			0.100	0.1189		mg/Kg		119	70 - 130	4	35
Ethylbenzene			0.100	0.1069		mg/Kg		107	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.2204		mg/Kg		110	70 - 130	5	35
o-Xylene			0.100	0.1044		mg/Kg		104	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2195-A-1-B MS
Matrix: Solid
Analysis Batch: 23768

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23784

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.0398	U F1	0.100	<0.0401	U F1	mg/Kg		0	70 - 130		
Toluene	4.47	F1	0.100	2.004	F1	mg/Kg		1777	70 - 130		
Ethylbenzene	2.36	F1	0.100	1.189	F1	mg/Kg		1069	70 - 130		
m-Xylene & p-Xylene	23.3	E	0.200	10.24	4	mg/Kg		4527	70 - 130		
o-Xylene	1.87	F1	0.100	0.6170	F1	mg/Kg		522	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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

Lab Sample ID: 890-2195-A-1-B MS
Matrix: Solid
Analysis Batch: 23768

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23784

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	24	S1-	70 - 130
1,4-Difluorobenzene (Surr)	11	S1-	70 - 130

Lab Sample ID: 890-2195-A-1-C MSD
Matrix: Solid
Analysis Batch: 23768

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 23784

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.0398	U F1	0.0998	<0.0399	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	4.47	F1	0.0998	2.017	F1	mg/Kg		1797	70 - 130	1	35
Ethylbenzene	2.36	F1	0.0998	1.198	F1	mg/Kg		1082	70 - 130	1	35
m-Xylene & p-Xylene	23.3	E	0.200	10.10	4	mg/Kg		4476	70 - 130	1	35
o-Xylene	1.87	F1	0.0998	0.6504	F1	mg/Kg		558	70 - 130	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	25	S1-	70 - 130
1,4-Difluorobenzene (Surr)	2	S1-	70 - 130

Lab Sample ID: MB 880-23912/5-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23912

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/21/22 09:54	04/21/22 12:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130	04/21/22 09:54	04/21/22 12:11	1
1,4-Difluorobenzene (Surr)	89		70 - 130	04/21/22 09:54	04/21/22 12:11	1

Lab Sample ID: LCS 880-23912/1-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08772		mg/Kg		88	70 - 130		
Toluene			0.100	0.08660		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08794		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1768		mg/Kg		88	70 - 130		
o-Xylene			0.100	0.08664		mg/Kg		87	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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

Lab Sample ID: LCS 880-23912/1-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23912

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene (Surr)	10	S1-	70 - 130

Lab Sample ID: LCSD 880-23912/2-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09280		mg/Kg		93	70 - 130	6	35
Toluene			0.100	0.08850		mg/Kg		89	70 - 130	2	35
Ethylbenzene			0.100	0.09034		mg/Kg		90	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1794		mg/Kg		90	70 - 130	1	35
o-Xylene			0.100	0.08836		mg/Kg		88	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-13710-A-10-E MS
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23912

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0998	0.1071		mg/Kg		107	70 - 130		
Toluene	<0.00200	U	0.0998	0.09008		mg/Kg		90	70 - 130		
Ethylbenzene	<0.00200	U	0.0998	0.07967		mg/Kg		80	70 - 130		
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1625		mg/Kg		81	70 - 130		
o-Xylene	<0.00200	U	0.0998	0.07941		mg/Kg		80	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-13710-A-10-F MSD
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 23912

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.1044		mg/Kg		105	70 - 130	3	35
Toluene	<0.00200	U	0.0996	0.09975		mg/Kg		100	70 - 130	10	35
Ethylbenzene	<0.00200	U	0.0996	0.09748		mg/Kg		98	70 - 130	20	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1960		mg/Kg		98	70 - 130	19	35
o-Xylene	<0.00200	U	0.0996	0.09803		mg/Kg		98	70 - 130	21	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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

Lab Sample ID: MB 880-23780/1-A
Matrix: Solid
Analysis Batch: 23761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23780

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		04/19/22 10:31	04/19/22 19:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/19/22 19:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/19/22 10:31	04/19/22 19:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*04/19/22 10:31*	*04/19/22 19:58*	*1*
o-Terphenyl	*120*		*70 - 130*	*04/19/22 10:31*	*04/19/22 19:58*	*1*

Lab Sample ID: LCS 880-23780/2-A
Matrix: Solid
Analysis Batch: 23761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23780

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1036		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	835.6		mg/Kg		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: LCSD 880-23780/3-A
Matrix: Solid
Analysis Batch: 23761

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23780

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1010		mg/Kg		101	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	840.2		mg/Kg		84	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: 880-13850-A-21-B MS
Matrix: Solid
Analysis Batch: 23761

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23780

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	1000	866.7		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	812.9		mg/Kg		79	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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

Lab Sample ID: 880-13850-A-21-B MS
Matrix: Solid
Analysis Batch: 23761

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23780

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-13850-A-21-C MSD
Matrix: Solid
Analysis Batch: 23761

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 23780

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	998	802.0		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	745.7		mg/Kg		73	70 - 130	9	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	77		70 - 130
o-Terphenyl	81		70 - 130

QC Association Summary

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

GC VOA

Prep Batch: 23750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-5	SS05	Total/NA	Solid	5035	
MB 880-23750/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-23750/1-B	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23750/2-B	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2197-5 MS	SS05	Total/NA	Solid	5035	
890-2197-5 MSD	SS05	Total/NA	Solid	5035	

Analysis Batch: 23768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-1	SS01	Total/NA	Solid	8021B	23784
890-2197-2	SS02	Total/NA	Solid	8021B	23784
890-2197-3	SS03	Total/NA	Solid	8021B	23784
890-2197-4	SS04	Total/NA	Solid	8021B	23784
MB 880-23779/5-A	Method Blank	Total/NA	Solid	8021B	23779
MB 880-23784/5-A	Method Blank	Total/NA	Solid	8021B	23784
LCS 880-23784/1-A	Lab Control Sample	Total/NA	Solid	8021B	23784
LCSD 880-23784/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23784
890-2195-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	23784
890-2195-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	23784

Prep Batch: 23779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-23779/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 23784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-1	SS01	Total/NA	Solid	5035	
890-2197-2	SS02	Total/NA	Solid	5035	
890-2197-3	SS03	Total/NA	Solid	5035	
890-2197-4	SS04	Total/NA	Solid	5035	
MB 880-23784/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23784/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23784/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2195-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-2195-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 23819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-5	SS05	Total/NA	Solid	8021B	23750
MB 880-23750/5-B	Method Blank	Total/NA	Solid	8021B	23750
LCS 880-23750/1-B	Lab Control Sample	Total/NA	Solid	8021B	23750
LCSD 880-23750/2-B	Lab Control Sample Dup	Total/NA	Solid	8021B	23750
890-2197-5 MS	SS05	Total/NA	Solid	8021B	23750
890-2197-5 MSD	SS05	Total/NA	Solid	8021B	23750

Analysis Batch: 23836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-1	SS01	Total/NA	Solid	Total BTEX	
890-2197-2	SS02	Total/NA	Solid	Total BTEX	
890-2197-3	SS03	Total/NA	Solid	Total BTEX	
890-2197-4	SS04	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

GC VOA (Continued)

Analysis Batch: 23836 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-5	SS05	Total/NA	Solid	Total BTEX	
890-2197-6	SS06	Total/NA	Solid	Total BTEX	

Analysis Batch: 23884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-6	SS06	Total/NA	Solid	8021B	23912
MB 880-23912/5-A	Method Blank	Total/NA	Solid	8021B	23912
LCS 880-23912/1-A	Lab Control Sample	Total/NA	Solid	8021B	23912
LCSD 880-23912/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23912
880-13710-A-10-E MS	Matrix Spike	Total/NA	Solid	8021B	23912
880-13710-A-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	23912

Prep Batch: 23912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-6	SS06	Total/NA	Solid	5035	
MB 880-23912/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23912/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23912/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13710-A-10-E MS	Matrix Spike	Total/NA	Solid	5035	
880-13710-A-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 23761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-1	SS01	Total/NA	Solid	8015B NM	23780
890-2197-2	SS02	Total/NA	Solid	8015B NM	23780
890-2197-3	SS03	Total/NA	Solid	8015B NM	23780
890-2197-4	SS04	Total/NA	Solid	8015B NM	23780
890-2197-5	SS05	Total/NA	Solid	8015B NM	23780
890-2197-6	SS06	Total/NA	Solid	8015B NM	23780
MB 880-23780/1-A	Method Blank	Total/NA	Solid	8015B NM	23780
LCS 880-23780/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23780
LCSD 880-23780/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23780
880-13850-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	23780
880-13850-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	23780

Prep Batch: 23780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-1	SS01	Total/NA	Solid	8015NM Prep	
890-2197-2	SS02	Total/NA	Solid	8015NM Prep	
890-2197-3	SS03	Total/NA	Solid	8015NM Prep	
890-2197-4	SS04	Total/NA	Solid	8015NM Prep	
890-2197-5	SS05	Total/NA	Solid	8015NM Prep	
890-2197-6	SS06	Total/NA	Solid	8015NM Prep	
MB 880-23780/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23780/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23780/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-13850-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-13850-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

GC Semi VOA

Analysis Batch: 23853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-1	SS01	Total/NA	Solid	8015 NM	
890-2197-2	SS02	Total/NA	Solid	8015 NM	
890-2197-3	SS03	Total/NA	Solid	8015 NM	
890-2197-4	SS04	Total/NA	Solid	8015 NM	
890-2197-5	SS05	Total/NA	Solid	8015 NM	
890-2197-6	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 24453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-1	SS01	Soluble	Solid	DI Leach	
890-2197-2	SS02	Soluble	Solid	DI Leach	
890-2197-3	SS03	Soluble	Solid	DI Leach	
890-2197-4	SS04	Soluble	Solid	DI Leach	
890-2197-5	SS05	Soluble	Solid	DI Leach	
890-2197-6	SS06	Soluble	Solid	DI Leach	

Analysis Batch: 24454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2197-1	SS01	Soluble	Solid	300.0	24453
890-2197-2	SS02	Soluble	Solid	300.0	24453
890-2197-3	SS03	Soluble	Solid	300.0	24453
890-2197-4	SS04	Soluble	Solid	300.0	24453
890-2197-5	SS05	Soluble	Solid	300.0	24453
890-2197-6	SS06	Soluble	Solid	300.0	24453

Lab Chronicle

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Client Sample ID: SS01
Date Collected: 04/13/22 12:00
Date Received: 04/18/22 08:04

Lab Sample ID: 890-2197-1
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			5.00 g	5 mL	23784	04/19/22 13:14	MR	XEN MID
Total/NA	Analysis	8021B		1			23768	04/20/22 03:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23836	04/20/22 11:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23853	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/20/22 00:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	24453	04/28/22 16:29	CH	XEN MID
Soluble	Analysis	300.0		100	0 mL	1.0 mL	24454	04/29/22 11:48	SC	XEN MID

Client Sample ID: SS02
Date Collected: 04/13/22 12:05
Date Received: 04/18/22 08:04

Lab Sample ID: 890-2197-2
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	23784	04/19/22 13:14	MR	XEN MID
Total/NA	Analysis	8021B		1			23768	04/20/22 03:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23836	04/20/22 11:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23853	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/20/22 01:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	24453	04/28/22 16:29	CH	XEN MID
Soluble	Analysis	300.0		100			24454	04/29/22 12:07	SC	XEN MID

Client Sample ID: SS03
Date Collected: 04/13/22 12:10
Date Received: 04/18/22 08:04

Lab Sample ID: 890-2197-3
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			4.96 g	5 mL	23784	04/19/22 13:14	MR	XEN MID
Total/NA	Analysis	8021B		1			23768	04/20/22 03:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23836	04/20/22 11:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23853	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/20/22 01:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	24453	04/28/22 16:29	CH	XEN MID
Soluble	Analysis	300.0		50			24454	04/29/22 12:13	SC	XEN MID

Client Sample ID: SS04
Date Collected: 04/13/22 12:15
Date Received: 04/18/22 08:04

Lab Sample ID: 890-2197-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	23784	04/19/22 13:14	MR	XEN MID
Total/NA	Analysis	8021B		1			23768	04/20/22 04:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23836	04/20/22 11:37	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Client Sample ID: SS04
Date Collected: 04/13/22 12:15
Date Received: 04/18/22 08:04

Lab Sample ID: 890-2197-4
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			23853	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/20/22 02:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24453	04/28/22 16:29	CH	XEN MID
Soluble	Analysis	300.0		50			24454	04/29/22 12:20	SC	XEN MID

Client Sample ID: SS05
Date Collected: 04/13/22 12:20
Date Received: 04/18/22 08:04

Lab Sample ID: 890-2197-5
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			4.96 g	5 mL	23750	04/19/22 17:00	MR	XEN MID
Total/NA	Analysis	8021B		1			23819	04/20/22 11:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23836	04/20/22 11:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23853	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/20/22 02:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	24453	04/28/22 16:29	CH	XEN MID
Soluble	Analysis	300.0		50			24454	04/29/22 12:26	SC	XEN MID

Client Sample ID: SS06
Date Collected: 04/13/22 12:25
Date Received: 04/18/22 08:04

Lab Sample ID: 890-2197-6
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	23912	04/21/22 09:54	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23884	04/21/22 23:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23836	04/20/22 11:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23853	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/20/22 02:59	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24453	04/28/22 16:29	CH	XEN MID
Soluble	Analysis	300.0		5			24454	04/29/22 12:45	SC	XEN MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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	T104704400-21-22	06-30-22

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: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

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

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Los Dos Medenos

Job ID: 890-2197-1
SDG: 03E1558007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2197-1	SS01	Solid	04/13/22 12:00	04/18/22 08:04	0.5
890-2197-2	SS02	Solid	04/13/22 12:05	04/18/22 08:04	0.5
890-2197-3	SS03	Solid	04/13/22 12:10	04/18/22 08:04	0.5
890-2197-4	SS04	Solid	04/13/22 12:15	04/18/22 08:04	0.5
890-2197-5	SS05	Solid	04/13/22 12:20	04/18/22 08:04	0.5
890-2197-6	SS06	Solid	04/13/22 12:25	04/18/22 08:04	0.5

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tecoma Morrissey	Bill to: (if different)	Adrian Baker
Company Name:	Ensolum, LLC	Company Name:	XTO Energy, Inc.
Address:	705 W Wadley Ave. Suite 210	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	817-683-2503	Email:	tmorrissey@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:	Los Dos Medanos	Turn Around	☑ Routine ☐ Rush
Project Number:	03E1558007	Due Date:	
Project Location:	Eddy	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Alexis Castro		
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:	3.6	
Total Containers:		Corrected Temperature:	3.4	

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

890-2197 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX	Chlorides (Cl⁻)	TPH	Sample Comments
SS01	S	04/13/22	1200	0.5'		1		X	X	X	
SS02			1205								
SS03			1210								
SS04			1215								
SS05			1220								
SS06			1225								
			AC								

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4/10/22 8:04	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2197-1
SDG Number: 03E1558007

Login Number: 2197
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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2197-1
SDG Number: 03E1558007

Login Number: 2197
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 04/19/22 11:38 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 America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2220-1
Laboratory Sample Delivery Group: 03E1558007
Client Project/Site: LOS MEDANOS

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
4/25/2022 3:38:33 PM

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: LOS MEDANOS

Laboratory Job ID: 890-2220-1
SDG: 03E1558007

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-2220-1
Project/Site: LOS MEDANOS SDG: 03E1558007

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Job ID: 890-2220-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2220-1

Receipt
The samples were received on 4/20/2022 4:34 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 14.8°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-23938 and analytical batch 880-23884 were outside control limits. Sample matrix interference and/or non-homogeneity are 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.

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-23944 and analytical batch 880-23891 were outside control limits. Sample matrix interference and/or non-homogeneity are 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: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Client Sample ID: SS07

Lab Sample ID: 890-2220-1
Matrix: Solid
Date Collected: 04/20/22 12:40
Date Received: 04/20/22 16:34
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/21/22 11:12	04/22/22 12:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/21/22 11:12	04/22/22 12:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/21/22 11:12	04/22/22 12:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/21/22 11:12	04/22/22 12:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/21/22 11:12	04/22/22 12:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/21/22 11:12	04/22/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*04/21/22 11:12*	*04/22/22 12:34*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*04/21/22 11:12*	*04/22/22 12:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			04/22/22 13:34	1

Method: 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			04/22/22 10:26	1

Method: 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		04/21/22 13:57	04/22/22 03:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/21/22 13:57	04/22/22 03:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 13:57	04/22/22 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*04/21/22 13:57*	*04/22/22 03:30*	*1*
o-Terphenyl	*92*		*70 - 130*	*04/21/22 13:57*	*04/22/22 03:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.88**		4.95		mg/Kg			04/21/22 22:56	1

Client Sample ID: SS08

Lab Sample ID: 890-2220-2
Matrix: Solid
Date Collected: 04/20/22 12:45
Date Received: 04/20/22 16:34
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 11:12	04/22/22 13:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 11:12	04/22/22 13:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 11:12	04/22/22 13:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/21/22 11:12	04/22/22 13:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 11:12	04/22/22 13:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/21/22 11:12	04/22/22 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*04/21/22 11:12*	*04/22/22 13:00*	*1*

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Client Sample ID: SS08

Lab Sample ID: 890-2220-2
Matrix: Solid
Date Collected: 04/20/22 12:45
Date Received: 04/20/22 16:34
Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/21/22 11:12*	*04/22/22 13:00*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/22/22 13:34	1

Method: 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			04/22/22 10:26	1

Method: 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		04/21/22 13:57	04/22/22 03:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/21/22 13:57	04/22/22 03:51	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/21/22 13:57	04/22/22 03:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*106*		*70 - 130*	*04/21/22 13:57*	*04/22/22 03:51*	*1*
o-Terphenyl	*105*		*70 - 130*	*04/21/22 13:57*	*04/22/22 03:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**215**		4.96	mg/Kg			04/21/22 23:05	1

Client Sample ID: SS09

Lab Sample ID: 890-2220-3
Matrix: Solid
Date Collected: 04/20/22 12:50
Date Received: 04/20/22 16:34
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		04/21/22 11:12	04/22/22 13:27	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/21/22 11:12	04/22/22 13:27	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/21/22 11:12	04/22/22 13:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/21/22 11:12	04/22/22 13:27	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/21/22 11:12	04/22/22 13:27	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/21/22 11:12	04/22/22 13:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*04/21/22 11:12*	*04/22/22 13:27*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/21/22 11:12*	*04/22/22 13:27*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			04/22/22 13:34	1

Method: 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			04/22/22 10:26	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Client Sample ID: SS09

Date Collected: 04/20/22 12:50
Date Received: 04/20/22 16:34
Sample Depth: 0.5

Lab Sample ID: 890-2220-3
Matrix: Solid

Method: 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		04/21/22 13:57	04/22/22 04:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 13:57	04/22/22 04:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 13:57	04/22/22 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*04/21/22 13:57*	*04/22/22 04:13*	*1*
o-Terphenyl	*101*		*70 - 130*	*04/21/22 13:57*	*04/22/22 04:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**157**		4.95		mg/Kg			04/21/22 23:14	1

Client Sample ID: SS10

Date Collected: 04/20/22 12:55
Date Received: 04/20/22 16:34
Sample Depth: 0.5

Lab Sample ID: 890-2220-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/21/22 11:12	04/22/22 13:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/21/22 11:12	04/22/22 13:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/21/22 11:12	04/22/22 13:53	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/21/22 11:12	04/22/22 13:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/21/22 11:12	04/22/22 13:53	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/21/22 11:12	04/22/22 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*04/21/22 11:12*	*04/22/22 13:53*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*04/21/22 11:12*	*04/22/22 13:53*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			04/22/22 13:34	1

Method: 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			04/22/22 10:26	1

Method: 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		04/21/22 13:57	04/22/22 04:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 13:57	04/22/22 04:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 13:57	04/22/22 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*04/21/22 13:57*	*04/22/22 04:35*	*1*
o-Terphenyl	*93*		*70 - 130*	*04/21/22 13:57*	*04/22/22 04:35*	*1*

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Client Sample ID: SS10
Date Collected: 04/20/22 12:55
Date Received: 04/20/22 16:34
Sample Depth: 0.5

Lab Sample ID: 890-2220-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.1		4.99		mg/Kg			04/21/22 23:23	1

Surrogate Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

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)										
880-13942-A-1-A MS	Matrix Spike	96	100										
880-13942-A-1-B MSD	Matrix Spike Duplicate	94	99										
890-2220-1	SS07	93	98										
890-2220-2	SS08	93	94										
890-2220-3	SS09	95	95										
890-2220-4	SS10	95	96										
LCS 880-23938/1-A	Lab Control Sample	87	101										
LCSD 880-23938/2-A	Lab Control Sample Dup	86	103										
MB 880-23912/5-A	Method Blank	64 S1-	89										
MB 880-23938/5-A	Method Blank	67 S1-	91										

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)										
890-2216-A-2-C MS	Matrix Spike	79	73										
890-2216-A-2-D MSD	Matrix Spike Duplicate	82	75										
890-2220-1	SS07	92	92										
890-2220-2	SS08	106	105										
890-2220-3	SS09	98	101										
890-2220-4	SS10	92	93										
LCS 880-23944/2-A	Lab Control Sample	100	90										
LCSD 880-23944/3-A	Lab Control Sample Dup	104	94										
MB 880-23944/1-A	Method Blank	95	100										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23912/5-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23912

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/21/22 09:54	04/21/22 12:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*64*	*S1-*	*70 - 130*	*04/21/22 09:54*	*04/21/22 12:11*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*04/21/22 09:54*	*04/21/22 12:11*	*1*

Lab Sample ID: MB 880-23938/5-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23938

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 11:12	04/22/22 03:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 11:12	04/22/22 03:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 11:12	04/22/22 03:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/21/22 11:12	04/22/22 03:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 11:12	04/22/22 03:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/21/22 11:12	04/22/22 03:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*04/21/22 11:12*	*04/22/22 03:35*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*04/21/22 11:12*	*04/22/22 03:35*	*1*

Lab Sample ID: LCS 880-23938/1-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23938

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09640		mg/Kg		96	70 - 130		
Toluene			0.100	0.09108		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.09337		mg/Kg		93	70 - 130		
m-Xylene & p-Xylene			0.200	0.1778		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.1152		mg/Kg		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-23938/2-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23938

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08835		mg/Kg		88	70 - 130	9	35

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

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

Lab Sample ID: LCSD 880-23938/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 23884 — **Prep Batch: 23938**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08353		mg/Kg		84	70 - 130	9	35
Ethylbenzene			0.100	0.08102		mg/Kg		81	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1601		mg/Kg		80	70 - 130	10	35
o-Xylene			0.100	0.09035		mg/Kg		90	70 - 130	24	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-13942-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 23884 — **Prep Batch: 23938**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.08937		mg/Kg		90	70 - 130
Toluene	<0.00200	U	0.0996	0.09115		mg/Kg		92	70 - 130
Ethylbenzene	<0.00200	U	0.0996	0.07588		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.1269	F1	mg/Kg		64	70 - 130
o-Xylene	<0.00200	U	0.0996	0.08863		mg/Kg		89	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-13942-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 23884 — **Prep Batch: 23938**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0992	0.09737		mg/Kg		98	70 - 130	9	35
Toluene	<0.00200	U	0.0992	0.09165		mg/Kg		92	70 - 130	1	35
Ethylbenzene	<0.00200	U	0.0992	0.07959		mg/Kg		80	70 - 130	5	35
m-Xylene & p-Xylene	<0.00401	U F1	0.198	0.1212	F1	mg/Kg		61	70 - 130	5	35
o-Xylene	<0.00200	U	0.0992	0.08874		mg/Kg		89	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-23944/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 23891 — **Prep Batch: 23944**

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		04/21/22 13:57	04/21/22 21:44	1

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

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

Lab Sample ID: MB 880-23944/1-A
Matrix: Solid
Analysis Batch: 23891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23944

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		04/21/22 13:57	04/21/22 21:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 13:57	04/21/22 21:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*04/21/22 13:57*	*04/21/22 21:44*	*1*
o-Terphenyl	*100*		*70 - 130*	*04/21/22 13:57*	*04/21/22 21:44*	*1*

Lab Sample ID: LCS 880-23944/2-A
Matrix: Solid
Analysis Batch: 23891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23944

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	821.9		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	972.8		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

Lab Sample ID: LCSD 880-23944/3-A
Matrix: Solid
Analysis Batch: 23891

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23944

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	900.4		mg/Kg		90	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1002		mg/Kg		100	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Lab Sample ID: 890-2216-A-2-C MS
Matrix: Solid
Analysis Batch: 23891

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23944

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	999	716.6		mg/Kg		70	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	668.0	F1	mg/Kg		64	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*79*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

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

Lab Sample ID: 890-2216-A-2-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 23891 — **Prep Batch: 23944**

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	791.5		mg/Kg		77	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	706.4	F1	mg/Kg		68	70 - 130	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*82*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23900/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23991

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/21/22 18:48	1

Lab Sample ID: LCS 880-23900/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23991

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	245.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-23900/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23991

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	245.1		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-2218-A-6-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23991

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	57.8		248	301.2		mg/Kg		98	90 - 110		

Lab Sample ID: 890-2218-A-6-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23991

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	57.8		248	313.7		mg/Kg		103	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

GC VOA

Analysis Batch: 23884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-1	SS07	Total/NA	Solid	8021B	23938
890-2220-2	SS08	Total/NA	Solid	8021B	23938
890-2220-3	SS09	Total/NA	Solid	8021B	23938
890-2220-4	SS10	Total/NA	Solid	8021B	23938
MB 880-23912/5-A	Method Blank	Total/NA	Solid	8021B	23912
MB 880-23938/5-A	Method Blank	Total/NA	Solid	8021B	23938
LCS 880-23938/1-A	Lab Control Sample	Total/NA	Solid	8021B	23938
LCSD 880-23938/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23938
880-13942-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	23938
880-13942-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	23938

Prep Batch: 23912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-23912/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 23938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-1	SS07	Total/NA	Solid	5035	
890-2220-2	SS08	Total/NA	Solid	5035	
890-2220-3	SS09	Total/NA	Solid	5035	
890-2220-4	SS10	Total/NA	Solid	5035	
MB 880-23938/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23938/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23938/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13942-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-13942-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 24051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-1	SS07	Total/NA	Solid	Total BTEX	
890-2220-2	SS08	Total/NA	Solid	Total BTEX	
890-2220-3	SS09	Total/NA	Solid	Total BTEX	
890-2220-4	SS10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 23891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-1	SS07	Total/NA	Solid	8015B NM	23944
890-2220-2	SS08	Total/NA	Solid	8015B NM	23944
890-2220-3	SS09	Total/NA	Solid	8015B NM	23944
890-2220-4	SS10	Total/NA	Solid	8015B NM	23944
MB 880-23944/1-A	Method Blank	Total/NA	Solid	8015B NM	23944
LCS 880-23944/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23944
LCSD 880-23944/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23944
890-2216-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	23944
890-2216-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	23944

Prep Batch: 23944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-1	SS07	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

GC Semi VOA (Continued)

Prep Batch: 23944 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-2	SS08	Total/NA	Solid	8015NM Prep	
890-2220-3	SS09	Total/NA	Solid	8015NM Prep	
890-2220-4	SS10	Total/NA	Solid	8015NM Prep	
MB 880-23944/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23944/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23944/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2216-A-2-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2216-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-1	SS07	Total/NA	Solid	8015 NM	
890-2220-2	SS08	Total/NA	Solid	8015 NM	
890-2220-3	SS09	Total/NA	Solid	8015 NM	
890-2220-4	SS10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-1	SS07	Soluble	Solid	DI Leach	
890-2220-2	SS08	Soluble	Solid	DI Leach	
890-2220-3	SS09	Soluble	Solid	DI Leach	
890-2220-4	SS10	Soluble	Solid	DI Leach	
MB 880-23900/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23900/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23900/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2218-A-6-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2218-A-6-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 23991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2220-1	SS07	Soluble	Solid	300.0	23900
890-2220-2	SS08	Soluble	Solid	300.0	23900
890-2220-3	SS09	Soluble	Solid	300.0	23900
890-2220-4	SS10	Soluble	Solid	300.0	23900
MB 880-23900/1-A	Method Blank	Soluble	Solid	300.0	23900
LCS 880-23900/2-A	Lab Control Sample	Soluble	Solid	300.0	23900
LCSD 880-23900/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23900
890-2218-A-6-D MS	Matrix Spike	Soluble	Solid	300.0	23900
890-2218-A-6-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	23900

Lab Chronicle

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Client Sample ID: SS07

Lab Sample ID: 890-2220-1

Date Collected: 04/20/22 12:40
Matrix: Solid
Date Received: 04/20/22 16:34

Prep 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	23938	04/21/22 11:12	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23884	04/22/22 12:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24051	04/22/22 13:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24019	04/22/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23944	04/21/22 13:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23891	04/22/22 03:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23900	04/21/22 09:36	CH	XEN MID
Soluble	Analysis	300.0		1			23991	04/21/22 22:56	CH	XEN MID

Client Sample ID: SS08

Lab Sample ID: 890-2220-2

Date Collected: 04/20/22 12:45
Matrix: Solid
Date Received: 04/20/22 16:34

Prep 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	23938	04/21/22 11:12	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23884	04/22/22 13:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24051	04/22/22 13:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24019	04/22/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23944	04/21/22 13:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23891	04/22/22 03:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	23900	04/21/22 09:36	CH	XEN MID
Soluble	Analysis	300.0		1			23991	04/21/22 23:05	CH	XEN MID

Client Sample ID: SS09

Lab Sample ID: 890-2220-3

Date Collected: 04/20/22 12:50
Matrix: Solid
Date Received: 04/20/22 16:34

Prep 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	23938	04/21/22 11:12	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23884	04/22/22 13:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24051	04/22/22 13:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24019	04/22/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23944	04/21/22 13:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23891	04/22/22 04:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23900	04/21/22 09:36	CH	XEN MID
Soluble	Analysis	300.0		1			23991	04/21/22 23:14	CH	XEN MID

Client Sample ID: SS10

Lab Sample ID: 890-2220-4

Date Collected: 04/20/22 12:55
Matrix: Solid
Date Received: 04/20/22 16:34

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	23938	04/21/22 11:12	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23884	04/22/22 13:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24051	04/22/22 13:34	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Client Sample ID: SS10

Date Collected: 04/20/22 12:55
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2220-4

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			24019	04/22/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23944	04/21/22 13:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23891	04/22/22 04:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23900	04/21/22 09:36	CH	XEN MID
Soluble	Analysis	300.0		1			23991	04/21/22 23:23	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

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	T104704400-21-22	06-30-22

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: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2220-1
SDG: 03E1558007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2220-1	SS07	Solid	04/20/22 12:40	04/20/22 16:34	0.5
890-2220-2	SS08	Solid	04/20/22 12:45	04/20/22 16:34	0.5
890-2220-3	SS09	Solid	04/20/22 12:50	04/20/22 16:34	0.5
890-2220-4	SS10	Solid	04/20/22 12:55	04/20/22 16:34	0.5

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Adrian Baker
Company Name:	Ensolum LLC.	Company Name:	XTO Energy, Inc.
Address:	2351 W Northwest Hwy Suite 1203A	Address:	3104 E. Green Street
City, State ZIP:	Dallas, TX, 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337.257.8307	Email:	bbeilill@ensolum.com; tmorrissey@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:	Los Medanos	Turn Around	☐ Routine ☑ Rush
Project Number:	03E1558007	Due Date:	2 day TAT
Project Location:	CC: 2094371001	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TMM-007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	15.0
Total Containers:		Corrected Temperature:	14.8

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: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
SS07	s	4/20/2022	1240	0.5'	G	1		x	x	x	
SS08	s	4/20/2022	1245	0.5'	G	1		x	x	x	
SS09	s	4/20/2022	1250	0.5'	G	1		x	x	x	
SS10	s	4/20/2022	1255	0.5'	G	1		x	x	x	

890-2220 Chain of Custody

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	Clive	4.20.2216.34	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-716 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2220-1
Address: 1211 W Florida Ave	Due Date Requested: 4/25/2022			
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: LOS MEDANOS	Project #: 89000093			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note.
			Preservation Code:		X	X						X	
SS07 (890-2220-1)	4/20/22	12 40 Mountain		Solid			X	X	X	X	X	1	
SS08 (890-2220-2)	4/20/22	12 45 Mountain		Solid			X	X	X	X	X	1	
SS09 (890-2220-3)	4/20/22	12 50 Mountain		Solid			X	X	X	X	X	1	
SS10 (890-2220-4)	4/20/22	12 55 Mountain		Solid			X	X	X	X	X	1	

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K - EDTA, L EDA
M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*

Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time.	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: [signature] 4·21·22	Date/Time	Company	Received by: [signature]	Date/Time: 4/21/22	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2220-1
SDG Number: 03E1558007

Login Number: 2220
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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2220-1
SDG Number: 03E1558007

Login Number: 2220
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 04/21/22 01:11 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").	True	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2221-1
Laboratory Sample Delivery Group: 03E1558007
Client Project/Site: LOS MEDANOS
Revision: 1

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
5/2/2022 9:48:52 AM

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: LOS MEDANOS

Laboratory Job ID: 890-2221-1
SDG: 03E1558007

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Job ID: 890-2221-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2221-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 4/26/2022. The report (revision 1) is being revised to change Sample IDs per Tacoma Morrissey (email)..

Receipt
The samples were received on 4/20/2022 4:34 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 was 14.8º C.

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-23912/1-A) and (MB 880-23912/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-24111 and analytical batch 880-24110 were outside control limits. Sample matrix interference and/or non-homogeneity are 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.

GC Semi VOA
Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-23947/3-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.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH01

Date Collected: 04/20/22 09:30
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 16:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 16:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 16:30	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/21/22 15:18	04/22/22 16:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 16:30	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/21/22 15:18	04/22/22 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/21/22 15:18*	*04/22/22 16:30*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:18*	*04/22/22 16:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 12:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 12:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*04/21/22 14:06*	*04/23/22 12:41*	*1*
o-Terphenyl	*106*		*70 - 130*	*04/21/22 14:06*	*04/23/22 12:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**124**		5.00		mg/Kg			04/25/22 18:33	1

Client Sample ID: PH01A

Date Collected: 04/20/22 09:35
Date Received: 04/20/22 16:34
Sample Depth: 2

Lab Sample ID: 890-2221-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 16:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 16:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 16:50	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/21/22 15:18	04/22/22 16:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 16:50	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/21/22 15:18	04/22/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/21/22 15:18*	*04/22/22 16:50*	*1*

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH01A
Date Collected: 04/20/22 09:35
Date Received: 04/20/22 16:34
Sample Depth: 2

Lab Sample ID: 890-2221-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:18*	*04/22/22 16:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 13:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 13:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*04/21/22 14:06*	*04/23/22 13:45*	*1*
o-Terphenyl	*102*		*70 - 130*	*04/21/22 14:06*	*04/23/22 13:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.8**		4.99		mg/Kg			04/25/22 20:19	1

Client Sample ID: PH01B
Date Collected: 04/20/22 09:45
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 17:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 17:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 17:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/21/22 15:18	04/22/22 17:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 17:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/21/22 15:18	04/22/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:18*	*04/22/22 17:11*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*04/21/22 15:18*	*04/22/22 17:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH01B
Date Collected: 04/20/22 09:45
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-3
Matrix: Solid

Method: 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		04/21/22 14:06	04/23/22 14:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 14:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*04/21/22 14:06*	*04/23/22 14:06*	*1*
o-Terphenyl	*100*		*70 - 130*	*04/21/22 14:06*	*04/23/22 14:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			04/25/22 20:28	1

Client Sample ID: PH02
Date Collected: 04/20/22 10:00
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 19:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 19:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 19:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/21/22 15:18	04/22/22 19:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 19:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/21/22 15:18	04/22/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:18*	*04/22/22 19:01*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/21/22 15:18*	*04/22/22 19:01*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 14:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 14:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*04/21/22 14:06*	*04/23/22 14:27*	*1*
o-Terphenyl	*100*		*70 - 130*	*04/21/22 14:06*	*04/23/22 14:27*	*1*

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH02
Date Collected: 04/20/22 10:00
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.5		5.05		mg/Kg			04/25/22 20:37	1

Client Sample ID: PH02A
Date Collected: 04/20/22 10:05
Date Received: 04/20/22 16:34
Sample Depth: 2

Lab Sample ID: 890-2221-5
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 19:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 19:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 19:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/21/22 15:18	04/22/22 19:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 19:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/21/22 15:18	04/22/22 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*04/21/22 15:18*	*04/22/22 19:22*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*04/21/22 15:18*	*04/22/22 19:22*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 14:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 14:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*04/21/22 14:06*	*04/23/22 14:48*	*1*
o-Terphenyl	*98*		*70 - 130*	*04/21/22 14:06*	*04/23/22 14:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			04/25/22 20:46	1

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH02B

Date Collected: 04/20/22 10:15
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 19:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 19:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 19:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/21/22 15:18	04/22/22 19:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 19:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/21/22 15:18	04/22/22 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/21/22 15:18*	*04/22/22 19:42*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*04/21/22 15:18*	*04/22/22 19:42*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 15:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 15:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*04/21/22 14:06*	*04/23/22 15:09*	*1*
o-Terphenyl	*102*		*70 - 130*	*04/21/22 14:06*	*04/23/22 15:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			04/25/22 21:12	1

Client Sample ID: PH03

Date Collected: 04/20/22 10:20
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-7
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 20:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 20:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 20:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/21/22 15:18	04/22/22 20:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 20:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/21/22 15:18	04/22/22 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*04/21/22 15:18*	*04/22/22 20:03*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH03
Date Collected: 04/20/22 10:20
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-7
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*04/21/22 15:18*	*04/22/22 20:03*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 15:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		04/21/22 14:06	04/23/22 15:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/21/22 14:06	04/23/22 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*04/21/22 14:06*	*04/23/22 15:30*	*1*
o-Terphenyl	*97*		*70 - 130*	*04/21/22 14:06*	*04/23/22 15:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28.6**		4.97	mg/Kg			04/25/22 21:21	1

Client Sample ID: PH03A
Date Collected: 04/20/22 10:35
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-8
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/21/22 15:18	04/22/22 20:23	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/21/22 15:18	04/22/22 20:23	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/21/22 15:18	04/22/22 20:23	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		04/21/22 15:18	04/22/22 20:23	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/21/22 15:18	04/22/22 20:23	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		04/21/22 15:18	04/22/22 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/21/22 15:18*	*04/22/22 20:23*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*04/21/22 15:18*	*04/22/22 20:23*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH03A

Date Collected: 04/20/22 10:35
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-8
Matrix: Solid

Method: 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		04/21/22 14:06	04/23/22 15:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 15:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*04/21/22 14:06*	*04/23/22 15:51*	*1*
o-Terphenyl	*124*		*70 - 130*	*04/21/22 14:06*	*04/23/22 15:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.62**		4.99		mg/Kg			04/25/22 21:30	1

Client Sample ID: PH04

Date Collected: 04/20/22 10:40
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-9
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 20:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 20:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 20:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/21/22 15:18	04/22/22 20:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 20:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/21/22 15:18	04/22/22 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:18*	*04/22/22 20:44*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*04/21/22 15:18*	*04/22/22 20:44*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 16:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 16:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*04/21/22 14:06*	*04/23/22 16:11*	*1*
o-Terphenyl	*89*		*70 - 130*	*04/21/22 14:06*	*04/23/22 16:11*	*1*

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH04

Date Collected: 04/20/22 10:40
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.0		4.99		mg/Kg			04/25/22 21:39	1

Client Sample ID: PH04A

Date Collected: 04/20/22 10:55
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-10
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/21/22 15:18	04/22/22 21:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/21/22 15:18	04/22/22 21:04	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/21/22 15:18	04/22/22 21:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/21/22 15:18	04/22/22 21:04	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/21/22 15:18	04/22/22 21:04	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/21/22 15:18	04/22/22 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*04/21/22 15:18*	*04/22/22 21:04*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*04/21/22 15:18*	*04/22/22 21:04*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 16:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 16:32	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*04/21/22 14:06*	*04/23/22 16:32*	*1*
o-Terphenyl	*90*		*70 - 130*	*04/21/22 14:06*	*04/23/22 16:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			04/25/22 21:48	1

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH05

Date Collected: 04/20/22 12:00
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-11

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 21:24	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 21:24	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 21:24	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/21/22 15:18	04/22/22 21:24	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/21/22 15:18	04/22/22 21:24	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/21/22 15:18	04/22/22 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/21/22 15:18*	*04/22/22 21:24*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:18*	*04/22/22 21:24*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 17:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 17:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*04/21/22 14:06*	*04/23/22 17:14*	*1*
o-Terphenyl	*95*		*70 - 130*	*04/21/22 14:06*	*04/23/22 17:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.8**		5.00		mg/Kg			04/25/22 21:57	1

Client Sample ID: PH05A

Date Collected: 04/20/22 12:15
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-12

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 21:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 21:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 21:45	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/21/22 15:18	04/22/22 21:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 21:45	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/21/22 15:18	04/22/22 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/21/22 15:18*	*04/22/22 21:45*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH05A
Date Collected: 04/20/22 12:15
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-12
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:18*	*04/22/22 21:45*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 17:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 17:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*04/21/22 14:06*	*04/23/22 17:35*	*1*
o-Terphenyl	*101*		*70 - 130*	*04/21/22 14:06*	*04/23/22 17:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.4**		5.04		mg/Kg			04/25/22 22:23	1

Client Sample ID: BH01
Date Collected: 04/20/22 12:00
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-13
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 22:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 22:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 22:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/21/22 15:18	04/22/22 22:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/21/22 15:18	04/22/22 22:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/21/22 15:18	04/22/22 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*04/21/22 15:18*	*04/22/22 22:05*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:18*	*04/22/22 22:05*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: BH01

Date Collected: 04/20/22 12:00
Date Received: 04/20/22 16:34
Sample Depth: 1

Lab Sample ID: 890-2221-13
Matrix: Solid

Method: 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		04/21/22 14:06	04/23/22 17:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 17:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/21/22 14:06	04/23/22 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*04/21/22 14:06*	*04/23/22 17:56*	*1*
o-Terphenyl	*95*		*70 - 130*	*04/21/22 14:06*	*04/23/22 17:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1880**		25.0		mg/Kg			04/25/22 22:32	5

Client Sample ID: BH01A

Date Collected: 04/20/22 12:05
Date Received: 04/20/22 16:34
Sample Depth: 2

Lab Sample ID: 890-2221-14
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/21/22 15:00	04/21/22 23:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/21/22 15:00	04/21/22 23:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/21/22 15:00	04/21/22 23:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/21/22 15:00	04/21/22 23:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/21/22 15:00	04/21/22 23:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/21/22 15:00	04/21/22 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*04/21/22 15:00*	*04/21/22 23:09*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/21/22 15:00*	*04/21/22 23:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 18:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 18:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*04/21/22 14:06*	*04/23/22 18:17*	*1*
o-Terphenyl	*112*		*70 - 130*	*04/21/22 14:06*	*04/23/22 18:17*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: BH01A
Date Collected: 04/20/22 12:05
Date Received: 04/20/22 16:34
Sample Depth: 2

Lab Sample ID: 890-2221-14
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1290		4.95		mg/Kg			04/25/22 22:59	1

Client Sample ID: BH01B
Date Collected: 04/20/22 12:15
Date Received: 04/20/22 16:34
Sample Depth: 4

Lab Sample ID: 890-2221-15
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/24/22 22:21	04/25/22 03:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/22 22:21	04/25/22 03:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/22 22:21	04/25/22 03:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/22 22:21	04/25/22 03:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/22 22:21	04/25/22 03:40	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/22 22:21	04/25/22 03:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*04/24/22 22:21*	*04/23/22 23:59*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/24/22 22:21*	*04/25/22 03:40*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/24/22 22:21*	*04/23/22 23:59*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/24/22 22:21*	*04/25/22 03:40*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			04/22/22 11:15	1

Method: 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			04/25/22 13:52	1

Method: 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		04/21/22 14:06	04/23/22 18:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/21/22 14:06	04/23/22 18:38	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/21/22 14:06	04/23/22 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*04/21/22 14:06*	*04/23/22 18:38*	*1*
o-Terphenyl	*99*		*70 - 130*	*04/21/22 14:06*	*04/23/22 18:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3320		24.9		mg/Kg			04/25/22 23:07	5

Surrogate Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-13710-A-10-E MS	Matrix Spike	86	106
880-13710-A-10-F MSD	Matrix Spike Duplicate	94	107
880-13850-A-1-H MS	Matrix Spike	102	95
880-13850-A-1-I MSD	Matrix Spike Duplicate	97	99
880-13949-A-21-A MS	Matrix Spike	101	106
880-13949-A-21-B MSD	Matrix Spike Duplicate	99	106
890-2216-A-1-E MS	Matrix Spike	100	105
890-2216-A-1-F MSD	Matrix Spike Duplicate	99	106
890-2221-1	PH01	113	104
890-2221-2	PH01A	105	104
890-2221-3	PH01B	104	105
890-2221-4	PH02	104	102
890-2221-5	PH02A	101	100
890-2221-6	PH02B	103	103
890-2221-7	PH03	101	103
890-2221-8	PH03A	107	106
890-2221-9	PH04	104	103
890-2221-10	PH04A	108	103
890-2221-11	PH05	107	104
890-2221-12	PH05A	103	104
890-2221-13	BH01	108	104
890-2221-14	BH01A	86	95
890-2221-15	BH01B	106	101
890-2221-15	BH01B	104	101
LCS 880-23912/1-A	Lab Control Sample	82	10 S1-
LCS 880-23951/1-A	Lab Control Sample	99	101
LCS 880-23953/1-A	Lab Control Sample	95	103
LCS 880-24111/1-A	Lab Control Sample	97	95
LCSD 880-23912/2-A	Lab Control Sample Dup	82	100
LCSD 880-23951/2-A	Lab Control Sample Dup	96	104
LCSD 880-23953/2-A	Lab Control Sample Dup	96	100
LCSD 880-24111/2-A	Lab Control Sample Dup	99	99
MB 880-23912/5-A	Method Blank	64 S1-	89
MB 880-23948/5-A	Method Blank	99	101
MB 880-23951/5-A	Method Blank	98	104
MB 880-23953/5-A	Method Blank	98	103
MB 880-24111/5-A	Method Blank	99	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)
890-2221-1	PH01	95	106
890-2221-1 MS	PH01	90	94

Surrogate Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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)
890-2221-1 MSD	PH01	88	92
890-2221-2	PH01A	91	102
890-2221-3	PH01B	89	100
890-2221-4	PH02	90	100
890-2221-5	PH02A	90	98
890-2221-6	PH02B	91	102
890-2221-7	PH03	90	97
890-2221-8	PH03A	108	124
890-2221-9	PH04	83	89
890-2221-10	PH04A	85	90
890-2221-11	PH05	87	95
890-2221-12	PH05A	91	101
890-2221-13	BH01	87	95
890-2221-14	BH01A	99	112
890-2221-15	BH01B	90	99

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-23947/2-A	Lab Control Sample	108	130
LCSD 880-23947/3-A	Lab Control Sample Dup	110	132 S1+
MB 880-23947/1-A	Method Blank	88	102

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23912/5-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23912

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 09:54	04/21/22 12:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/21/22 09:54	04/21/22 12:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*64*	*S1-*	*70 - 130*	*04/21/22 09:54*	*04/21/22 12:11*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*04/21/22 09:54*	*04/21/22 12:11*	*1*

Lab Sample ID: LCS 880-23912/1-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08772		mg/Kg		88	70 - 130		
Toluene			0.100	0.08660		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08794		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1768		mg/Kg		88	70 - 130		
o-Xylene			0.100	0.08664		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*
1,4-Difluorobenzene (Surr)	*10*	*S1-*	*70 - 130*

Lab Sample ID: LCSD 880-23912/2-A
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09280		mg/Kg		93	70 - 130	6	35
Toluene			0.100	0.08850		mg/Kg		89	70 - 130	2	35
Ethylbenzene			0.100	0.09034		mg/Kg		90	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1794		mg/Kg		90	70 - 130	1	35
o-Xylene			0.100	0.08836		mg/Kg		88	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-13710-A-10-E MS
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23912

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0998	0.1071		mg/Kg		107	70 - 130		
Toluene	<0.00200	U	0.0998	0.09008		mg/Kg		90	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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

Lab Sample ID: 880-13710-A-10-E MS
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23912

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.07967		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1625		mg/Kg		81	70 - 130
o-Xylene	<0.00200	U	0.0998	0.07941		mg/Kg		80	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 880-13710-A-10-F MSD
Matrix: Solid
Analysis Batch: 23884

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 23912

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.1044		mg/Kg		105	70 - 130	3	35
Toluene	<0.00200	U	0.0996	0.09975		mg/Kg		100	70 - 130	10	35
Ethylbenzene	<0.00200	U	0.0996	0.09748		mg/Kg		98	70 - 130	20	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1960		mg/Kg		98	70 - 130	19	35
o-Xylene	<0.00200	U	0.0996	0.09803		mg/Kg		98	70 - 130	21	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: MB 880-23948/5-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23948

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 14:40	04/23/22 01:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 14:40	04/23/22 01:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 14:40	04/23/22 01:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/21/22 14:40	04/23/22 01:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 14:40	04/23/22 01:15	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/21/22 14:40	04/23/22 01:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*04/21/22 14:40*	*04/23/22 01:15*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/21/22 14:40*	*04/23/22 01:15*	*1*

Lab Sample ID: MB 880-23951/5-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23951

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:01	04/23/22 17:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:01	04/23/22 17:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:01	04/23/22 17:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/21/22 15:01	04/23/22 17:14	1

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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

Lab Sample ID: MB 880-23951/5-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23951

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:01	04/23/22 17:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/21/22 15:01	04/23/22 17:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*04/21/22 15:01*	*04/23/22 17:14*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/21/22 15:01*	*04/23/22 17:14*	*1*

Lab Sample ID: LCS 880-23951/1-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23951

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07802		mg/Kg		78	70 - 130		
Toluene			0.100	0.09379		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.09701		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1958		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.09895		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-23951/2-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23951

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08535		mg/Kg		85	70 - 130	9	35
Toluene			0.100	0.09393		mg/Kg		94	70 - 130	0	35
Ethylbenzene			0.100	0.09600		mg/Kg		96	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1904		mg/Kg		95	70 - 130	3	35
o-Xylene			0.100	0.09562		mg/Kg		96	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-13949-A-21-A MS
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.100	0.1123		mg/Kg		112	70 - 130		
Toluene	<0.00199	U	0.100	0.1101		mg/Kg		110	70 - 130		
Ethylbenzene	<0.00199	U	0.100	0.09898		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.201	0.2028		mg/Kg		101	70 - 130		
o-Xylene	<0.00199	U	0.100	0.09483		mg/Kg		94	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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

Lab Sample ID: 880-13949-A-21-A MS
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23951

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-13949-A-21-B MSD
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 23951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.1169		mg/Kg		118	70 - 130	4	35
Toluene	<0.00199	U	0.0994	0.1155		mg/Kg		116	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.0994	0.1008		mg/Kg		101	70 - 130	2	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2061		mg/Kg		104	70 - 130	2	35
o-Xylene	<0.00199	U	0.0994	0.09749		mg/Kg		98	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: MB 880-23953/5-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23953

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 13:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 13:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 13:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/21/22 15:18	04/22/22 13:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/21/22 15:18	04/22/22 13:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/21/22 15:18	04/22/22 13:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/21/22 15:18	04/22/22 13:37	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/21/22 15:18	04/22/22 13:37	1

Lab Sample ID: LCS 880-23953/1-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23953

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08351		mg/Kg		84	70 - 130		
Toluene			0.100	0.09267		mg/Kg		93	70 - 130		
Ethylbenzene			0.100	0.09526		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1903		mg/Kg		95	70 - 130		
o-Xylene			0.100	0.09413		mg/Kg		94	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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

Lab Sample ID: LCS 880-23953/1-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23953

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

Lab Sample ID: LCSD 880-23953/2-A
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23953

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08219		mg/Kg		82	70 - 130	2	35
Toluene			0.100	0.09657		mg/Kg		97	70 - 130	4	35
Ethylbenzene			0.100	0.09862		mg/Kg		99	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1984		mg/Kg		99	70 - 130	4	35
o-Xylene			0.100	0.09882		mg/Kg		99	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-2216-A-1-E MS
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23953

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.08703		mg/Kg		87	70 - 130		
Toluene	<0.00201	U	0.100	0.08753		mg/Kg		87	70 - 130		
Ethylbenzene	<0.00201	U	0.100	0.07868		mg/Kg		79	70 - 130		
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1546		mg/Kg		77	70 - 130		
o-Xylene	<0.00201	U	0.100	0.07694		mg/Kg		77	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-2216-A-1-F MSD
Matrix: Solid
Analysis Batch: 23987

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 23953

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	0.08359		mg/Kg		84	70 - 130	4	35
Toluene	<0.00201	U	0.0996	0.08837		mg/Kg		89	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.0996	0.08567		mg/Kg		86	70 - 130	9	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1705		mg/Kg		86	70 - 130	10	35
o-Xylene	<0.00201	U	0.0996	0.08421		mg/Kg		85	70 - 130	9	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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

Lab Sample ID: MB 880-24111/5-A
Matrix: Solid
Analysis Batch: 24110

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24111

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/24/22 22:21	04/25/22 01:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/22 22:21	04/25/22 01:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/22 22:21	04/25/22 01:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/24/22 22:21	04/25/22 01:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/22 22:21	04/25/22 01:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/24/22 22:21	04/25/22 01:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*04/24/22 22:21*	*04/25/22 01:09*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*04/24/22 22:21*	*04/25/22 01:09*	*1*

Lab Sample ID: LCS 880-24111/1-A
Matrix: Solid
Analysis Batch: 24110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24111

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07124		mg/Kg		71	70 - 130		
Toluene			0.100	0.09089		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.09549		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1938		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09767		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-24111/2-A
Matrix: Solid
Analysis Batch: 24110

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 24111

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07926		mg/Kg		79	70 - 130	11	35
Toluene			0.100	0.09758		mg/Kg		98	70 - 130	7	35
Ethylbenzene			0.100	0.1017		mg/Kg		102	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2056		mg/Kg		103	70 - 130	6	35
o-Xylene			0.100	0.1035		mg/Kg		104	70 - 130	6	35

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

Lab Sample ID: 880-13850-A-1-H MS
Matrix: Solid
Analysis Batch: 24110

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 24111

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.09875		mg/Kg		99	70 - 130		
Toluene	<0.00200	U F1	0.100	0.1308	F1	mg/Kg		131	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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

Lab Sample ID: 880-13850-A-1-H MS
Matrix: Solid
Analysis Batch: 24110

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 24111

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.1271		mg/Kg		127	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.2702	F1	mg/Kg		135	70 - 130
o-Xylene	<0.00200	U	0.100	0.1254		mg/Kg		125	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-13850-A-1-I MSD
Matrix: Solid
Analysis Batch: 24110

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 24111

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.1096		mg/Kg		110	70 - 130	10	35
Toluene	<0.00200	U F1	0.0996	0.1232		mg/Kg		124	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.0996	0.1164		mg/Kg		117	70 - 130	9	35
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.2439		mg/Kg		122	70 - 130	10	35
o-Xylene	<0.00200	U	0.0996	0.1147		mg/Kg		115	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-23947/1-A
Matrix: Solid
Analysis Batch: 24094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23947

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		04/21/22 14:06	04/23/22 11:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 11:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/21/22 14:06	04/23/22 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*04/21/22 14:06*	*04/23/22 11:38*	*1*
o-Terphenyl	*102*		*70 - 130*	*04/21/22 14:06*	*04/23/22 11:38*	*1*

Lab Sample ID: LCS 880-23947/2-A
Matrix: Solid
Analysis Batch: 24094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23947

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	873.0		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1038		mg/Kg		104	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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

Lab Sample ID: LCS 880-23947/2-A
Matrix: Solid
Analysis Batch: 24094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23947

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	130		70 - 130

Lab Sample ID: LCSD 880-23947/3-A
Matrix: Solid
Analysis Batch: 24094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23947

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	861.5		mg/Kg		86	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1042		mg/Kg		104	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	132	S1+	70 - 130

Lab Sample ID: 890-2221-1 MS
Matrix: Solid
Analysis Batch: 24094

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 23947

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	999	956.1		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	851.5		mg/Kg		83	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 890-2221-1 MSD
Matrix: Solid
Analysis Batch: 24094

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 23947

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	953.6		mg/Kg		94	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	838.8		mg/Kg		82	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	92		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23943/1-A
Matrix: Solid
Analysis Batch: 24185

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			04/25/22 18:06	1

Lab Sample ID: LCS 880-23943/2-A
Matrix: Solid
Analysis Batch: 24185

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	254.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-23943/3-A
Matrix: Solid
Analysis Batch: 24185

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	2	20

Lab Sample ID: 890-2221-1 MS
Matrix: Solid
Analysis Batch: 24185

Client Sample ID: PH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	124		250	369.9		mg/Kg		98	90 - 110		

Lab Sample ID: 890-2221-1 MSD
Matrix: Solid
Analysis Batch: 24185

Client Sample ID: PH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	124		250	369.3		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-2221-11 MS
Matrix: Solid
Analysis Batch: 24185

Client Sample ID: PH05
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	50.8		250	298.1		mg/Kg		99	90 - 110		

Lab Sample ID: 890-2221-11 MSD
Matrix: Solid
Analysis Batch: 24185

Client Sample ID: PH05
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.8		250	297.6		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

GC VOA

Analysis Batch: 23884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-14	BH01A	Total/NA	Solid	8021B	23912
MB 880-23912/5-A	Method Blank	Total/NA	Solid	8021B	23912
LCS 880-23912/1-A	Lab Control Sample	Total/NA	Solid	8021B	23912
LCSD 880-23912/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23912
880-13710-A-10-E MS	Matrix Spike	Total/NA	Solid	8021B	23912
880-13710-A-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	23912

Prep Batch: 23912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-14	BH01A	Total/NA	Solid	5035	
MB 880-23912/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23912/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23912/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13710-A-10-E MS	Matrix Spike	Total/NA	Solid	5035	
880-13710-A-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 23948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-23948/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 23951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-23951/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23951/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23951/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13949-A-21-A MS	Matrix Spike	Total/NA	Solid	5035	
880-13949-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 23953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-1	PH01	Total/NA	Solid	5035	
890-2221-2	PH01A	Total/NA	Solid	5035	
890-2221-3	PH01B	Total/NA	Solid	5035	
890-2221-4	PH02	Total/NA	Solid	5035	
890-2221-5	PH02A	Total/NA	Solid	5035	
890-2221-6	PH02B	Total/NA	Solid	5035	
890-2221-7	PH03	Total/NA	Solid	5035	
890-2221-8	PH03A	Total/NA	Solid	5035	
890-2221-9	PH04	Total/NA	Solid	5035	
890-2221-10	PH04A	Total/NA	Solid	5035	
890-2221-11	PH05	Total/NA	Solid	5035	
890-2221-12	PH05A	Total/NA	Solid	5035	
890-2221-13	BH01	Total/NA	Solid	5035	
MB 880-23953/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23953/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23953/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2216-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2216-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

GC VOA

Analysis Batch: 23987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-1	PH01	Total/NA	Solid	8021B	23953
890-2221-2	PH01A	Total/NA	Solid	8021B	23953
890-2221-3	PH01B	Total/NA	Solid	8021B	23953
890-2221-4	PH02	Total/NA	Solid	8021B	23953
890-2221-5	PH02A	Total/NA	Solid	8021B	23953
890-2221-6	PH02B	Total/NA	Solid	8021B	23953
890-2221-7	PH03	Total/NA	Solid	8021B	23953
890-2221-8	PH03A	Total/NA	Solid	8021B	23953
890-2221-9	PH04	Total/NA	Solid	8021B	23953
890-2221-10	PH04A	Total/NA	Solid	8021B	23953
890-2221-11	PH05	Total/NA	Solid	8021B	23953
890-2221-12	PH05A	Total/NA	Solid	8021B	23953
890-2221-13	BH01	Total/NA	Solid	8021B	23953
890-2221-15	BH01B	Total/NA	Solid	8021B	24111
MB 880-23948/5-A	Method Blank	Total/NA	Solid	8021B	23948
MB 880-23951/5-A	Method Blank	Total/NA	Solid	8021B	23951
MB 880-23953/5-A	Method Blank	Total/NA	Solid	8021B	23953
LCS 880-23951/1-A	Lab Control Sample	Total/NA	Solid	8021B	23951
LCS 880-23953/1-A	Lab Control Sample	Total/NA	Solid	8021B	23953
LCSD 880-23951/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23951
LCSD 880-23953/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23953
880-13949-A-21-A MS	Matrix Spike	Total/NA	Solid	8021B	23951
880-13949-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	23951
890-2216-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	23953
890-2216-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	23953

Analysis Batch: 24025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-1	PH01	Total/NA	Solid	Total BTEX	
890-2221-2	PH01A	Total/NA	Solid	Total BTEX	
890-2221-3	PH01B	Total/NA	Solid	Total BTEX	
890-2221-4	PH02	Total/NA	Solid	Total BTEX	
890-2221-5	PH02A	Total/NA	Solid	Total BTEX	
890-2221-6	PH02B	Total/NA	Solid	Total BTEX	
890-2221-7	PH03	Total/NA	Solid	Total BTEX	
890-2221-8	PH03A	Total/NA	Solid	Total BTEX	
890-2221-9	PH04	Total/NA	Solid	Total BTEX	
890-2221-10	PH04A	Total/NA	Solid	Total BTEX	
890-2221-11	PH05	Total/NA	Solid	Total BTEX	
890-2221-12	PH05A	Total/NA	Solid	Total BTEX	
890-2221-13	BH01	Total/NA	Solid	Total BTEX	
890-2221-14	BH01A	Total/NA	Solid	Total BTEX	
890-2221-15	BH01B	Total/NA	Solid	Total BTEX	

Analysis Batch: 24110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-15	BH01B	Total/NA	Solid	8021B	24111
MB 880-24111/5-A	Method Blank	Total/NA	Solid	8021B	24111
LCS 880-24111/1-A	Lab Control Sample	Total/NA	Solid	8021B	24111
LCSD 880-24111/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24111
880-13850-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	24111

QC Association Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

GC VOA (Continued)

Analysis Batch: 24110 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	24111

Prep Batch: 24111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-15	BH01B	Total/NA	Solid	5035	
MB 880-24111/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24111/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24111/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13850-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
880-13850-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 23947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-1	PH01	Total/NA	Solid	8015NM Prep	
890-2221-2	PH01A	Total/NA	Solid	8015NM Prep	
890-2221-3	PH01B	Total/NA	Solid	8015NM Prep	
890-2221-4	PH02	Total/NA	Solid	8015NM Prep	
890-2221-5	PH02A	Total/NA	Solid	8015NM Prep	
890-2221-6	PH02B	Total/NA	Solid	8015NM Prep	
890-2221-7	PH03	Total/NA	Solid	8015NM Prep	
890-2221-8	PH03A	Total/NA	Solid	8015NM Prep	
890-2221-9	PH04	Total/NA	Solid	8015NM Prep	
890-2221-10	PH04A	Total/NA	Solid	8015NM Prep	
890-2221-11	PH05	Total/NA	Solid	8015NM Prep	
890-2221-12	PH05A	Total/NA	Solid	8015NM Prep	
890-2221-13	BH01	Total/NA	Solid	8015NM Prep	
890-2221-14	BH01A	Total/NA	Solid	8015NM Prep	
890-2221-15	BH01B	Total/NA	Solid	8015NM Prep	
MB 880-23947/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23947/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23947/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2221-1 MS	PH01	Total/NA	Solid	8015NM Prep	
890-2221-1 MSD	PH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-1	PH01	Total/NA	Solid	8015B NM	23947
890-2221-2	PH01A	Total/NA	Solid	8015B NM	23947
890-2221-3	PH01B	Total/NA	Solid	8015B NM	23947
890-2221-4	PH02	Total/NA	Solid	8015B NM	23947
890-2221-5	PH02A	Total/NA	Solid	8015B NM	23947
890-2221-6	PH02B	Total/NA	Solid	8015B NM	23947
890-2221-7	PH03	Total/NA	Solid	8015B NM	23947
890-2221-8	PH03A	Total/NA	Solid	8015B NM	23947
890-2221-9	PH04	Total/NA	Solid	8015B NM	23947
890-2221-10	PH04A	Total/NA	Solid	8015B NM	23947
890-2221-11	PH05	Total/NA	Solid	8015B NM	23947
890-2221-12	PH05A	Total/NA	Solid	8015B NM	23947
890-2221-13	BH01	Total/NA	Solid	8015B NM	23947

QC Association Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

GC Semi VOA (Continued)

Analysis Batch: 24094 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-14	BH01A	Total/NA	Solid	8015B NM	23947
890-2221-15	BH01B	Total/NA	Solid	8015B NM	23947
MB 880-23947/1-A	Method Blank	Total/NA	Solid	8015B NM	23947
LCS 880-23947/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23947
LCSD 880-23947/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23947
890-2221-1 MS	PH01	Total/NA	Solid	8015B NM	23947
890-2221-1 MSD	PH01	Total/NA	Solid	8015B NM	23947

Analysis Batch: 24194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-1	PH01	Total/NA	Solid	8015 NM	
890-2221-2	PH01A	Total/NA	Solid	8015 NM	
890-2221-3	PH01B	Total/NA	Solid	8015 NM	
890-2221-4	PH02	Total/NA	Solid	8015 NM	
890-2221-5	PH02A	Total/NA	Solid	8015 NM	
890-2221-6	PH02B	Total/NA	Solid	8015 NM	
890-2221-7	PH03	Total/NA	Solid	8015 NM	
890-2221-8	PH03A	Total/NA	Solid	8015 NM	
890-2221-9	PH04	Total/NA	Solid	8015 NM	
890-2221-10	PH04A	Total/NA	Solid	8015 NM	
890-2221-11	PH05	Total/NA	Solid	8015 NM	
890-2221-12	PH05A	Total/NA	Solid	8015 NM	
890-2221-13	BH01	Total/NA	Solid	8015 NM	
890-2221-14	BH01A	Total/NA	Solid	8015 NM	
890-2221-15	BH01B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-1	PH01	Soluble	Solid	DI Leach	
890-2221-2	PH01A	Soluble	Solid	DI Leach	
890-2221-3	PH01B	Soluble	Solid	DI Leach	
890-2221-4	PH02	Soluble	Solid	DI Leach	
890-2221-5	PH02A	Soluble	Solid	DI Leach	
890-2221-6	PH02B	Soluble	Solid	DI Leach	
890-2221-7	PH03	Soluble	Solid	DI Leach	
890-2221-8	PH03A	Soluble	Solid	DI Leach	
890-2221-9	PH04	Soluble	Solid	DI Leach	
890-2221-10	PH04A	Soluble	Solid	DI Leach	
890-2221-11	PH05	Soluble	Solid	DI Leach	
890-2221-12	PH05A	Soluble	Solid	DI Leach	
890-2221-13	BH01	Soluble	Solid	DI Leach	
890-2221-14	BH01A	Soluble	Solid	DI Leach	
890-2221-15	BH01B	Soluble	Solid	DI Leach	
MB 880-23943/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23943/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23943/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2221-1 MS	PH01	Soluble	Solid	DI Leach	
890-2221-1 MSD	PH01	Soluble	Solid	DI Leach	
890-2221-11 MS	PH05	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

HPLC/IC (Continued)

Leach Batch: 23943 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-11 MSD	PH05	Soluble	Solid	DI Leach	

Analysis Batch: 24185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2221-1	PH01	Soluble	Solid	300.0	23943
890-2221-2	PH01A	Soluble	Solid	300.0	23943
890-2221-3	PH01B	Soluble	Solid	300.0	23943
890-2221-4	PH02	Soluble	Solid	300.0	23943
890-2221-5	PH02A	Soluble	Solid	300.0	23943
890-2221-6	PH02B	Soluble	Solid	300.0	23943
890-2221-7	PH03	Soluble	Solid	300.0	23943
890-2221-8	PH03A	Soluble	Solid	300.0	23943
890-2221-9	PH04	Soluble	Solid	300.0	23943
890-2221-10	PH04A	Soluble	Solid	300.0	23943
890-2221-11	PH05	Soluble	Solid	300.0	23943
890-2221-12	PH05A	Soluble	Solid	300.0	23943
890-2221-13	BH01	Soluble	Solid	300.0	23943
890-2221-14	BH01A	Soluble	Solid	300.0	23943
890-2221-15	BH01B	Soluble	Solid	300.0	23943
MB 880-23943/1-A	Method Blank	Soluble	Solid	300.0	23943
LCS 880-23943/2-A	Lab Control Sample	Soluble	Solid	300.0	23943
LCSD 880-23943/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23943
890-2221-1 MS	PH01	Soluble	Solid	300.0	23943
890-2221-1 MSD	PH01	Soluble	Solid	300.0	23943
890-2221-11 MS	PH05	Soluble	Solid	300.0	23943
890-2221-11 MSD	PH05	Soluble	Solid	300.0	23943

Lab Chronicle

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH01
Date Collected: 04/20/22 09:30
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-1
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			4.95 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 16:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 12:41	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 18:33	CH	XEN MID

Client Sample ID: PH01A
Date Collected: 04/20/22 09:35
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 16:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 13:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 20:19	CH	XEN MID

Client Sample ID: PH01B
Date Collected: 04/20/22 09:45
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-3
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	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 17:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 14:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 20:28	CH	XEN MID

Client Sample ID: PH02
Date Collected: 04/20/22 10:00
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-4
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	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 19:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH02
Date Collected: 04/20/22 10:00
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-4
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			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 14:27	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 20:37	CH	XEN MID

Client Sample ID: PH02A
Date Collected: 04/20/22 10:05
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-5
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			5.03 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 19:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 14:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 20:46	CH	XEN MID

Client Sample ID: PH02B
Date Collected: 04/20/22 10:15
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 19:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 15:09	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 21:12	CH	XEN MID

Client Sample ID: PH03
Date Collected: 04/20/22 10:20
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 20:03	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 15:30	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH03
Date Collected: 04/20/22 10:20
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 21:21	CH	XEN MID

Client Sample ID: PH03A
Date Collected: 04/20/22 10:35
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-8
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			4.96 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 20:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 15:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 21:30	CH	XEN MID

Client Sample ID: PH04
Date Collected: 04/20/22 10:40
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 20:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 16:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 21:39	CH	XEN MID

Client Sample ID: PH04A
Date Collected: 04/20/22 10:55
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 21:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 16:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 21:48	CH	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: PH05
Date Collected: 04/20/22 12:00
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 21:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 17:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 21:57	CH	XEN MID

Client Sample ID: PH05A
Date Collected: 04/20/22 12:15
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 21:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 17:35	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 22:23	CH	XEN MID

Client Sample ID: BH01
Date Collected: 04/20/22 12:00
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	23953	04/21/22 15:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/22/22 22:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 17:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		5			24185	04/25/22 22:32	CH	XEN MID

Client Sample ID: BH01A
Date Collected: 04/20/22 12:05
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	23912	04/21/22 15:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23884	04/21/22 23:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Client Sample ID: BH01A
Date Collected: 04/20/22 12:05
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-14
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			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 18:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		1			24185	04/25/22 22:59	CH	XEN MID

Client Sample ID: BH01B
Date Collected: 04/20/22 12:15
Date Received: 04/20/22 16:34

Lab Sample ID: 890-2221-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	23987	04/23/22 23:59	MR	XEN MID
Total/NA	Prep	5035			5.01 g	5 mL	24111	04/24/22 22:21	MR	XEN MID
Total/NA	Prep	5035			5.01 g	5 mL	24111	04/24/22 22:21	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24110	04/25/22 03:40	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24025	04/22/22 11:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24194	04/25/22 13:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	23947	04/21/22 14:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24094	04/23/22 18:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23943	04/21/22 13:52	CH	XEN MID
Soluble	Analysis	300.0		5			24185	04/25/22 23:07	CH	XEN MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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	T104704400-21-22	06-30-22

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: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

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

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: LOS MEDANOS

Job ID: 890-2221-1
SDG: 03E1558007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2221-1	PH01	Solid	04/20/22 09:30	04/20/22 16:34	1
890-2221-2	PH01A	Solid	04/20/22 09:35	04/20/22 16:34	2
890-2221-3	PH01B	Solid	04/20/22 09:45	04/20/22 16:34	4
890-2221-4	PH02	Solid	04/20/22 10:00	04/20/22 16:34	1
890-2221-5	PH02A	Solid	04/20/22 10:05	04/20/22 16:34	2
890-2221-6	PH02B	Solid	04/20/22 10:15	04/20/22 16:34	4
890-2221-7	PH03	Solid	04/20/22 10:20	04/20/22 16:34	1
890-2221-8	PH03A	Solid	04/20/22 10:35	04/20/22 16:34	4
890-2221-9	PH04	Solid	04/20/22 10:40	04/20/22 16:34	1
890-2221-10	PH04A	Solid	04/20/22 10:55	04/20/22 16:34	4
890-2221-11	PH05	Solid	04/20/22 12:00	04/20/22 16:34	1
890-2221-12	PH05A	Solid	04/20/22 12:15	04/20/22 16:34	4
890-2221-13	BH01	Solid	04/20/22 12:00	04/20/22 16:34	1
890-2221-14	BH01A	Solid	04/20/22 12:05	04/20/22 16:34	2
890-2221-15	BH01B	Solid	04/20/22 12:15	04/20/22 16:34	4

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Adrian Baker
Company Name:	Ensolum LLC.	Company Name:	XTO Energy, Inc.
Address:	2351 W Northwest Hwy Suite 1203A	Address:	3104 E. Green Street
City, State ZIP:	Dallas, TX, 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337.257.8307	Email:	bbelill@ensolum.com; tmorrissey@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:	Los Medanos	Turn Around	
Project Number:	03E1558007	☐ Routine ☑ Rush	
Project Location:	CC: 2094371001	Due Date:	2 day TAT
Sampler's Name:	Conner Shore	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:	NM007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	15.0	
Total Containers:		Corrected Temperature:	14.8	

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: 300.0)	TPH (8015)	BTEX (8021	Sample Comments
PH01	s	4/20/2022	930	1'	G	1		x	x	x	
PH01	s	4/20/2022	935	2'	G	1		x	x	x	
PH01	s	4/20/2022	945	4'	G	1		x	x	x	
PH02	s	4/20/2022	1000	1'	G	1		x	x	x	
PH02	s	4/20/2022	1005	2'	G	1		x	x	x	
PH02	s	4/20/2022	1015	4'	G	1		x	x	x	
PH03	s	4/20/2022	1020	1'	G	1		x	x	x	
PH03	s	4/20/2022	1035	4'	G	1		x	x	x	
PH04	s	4/20/2022	1040	1'	G	1		x	x	x	
PH04	s	4/20/2022	1055	4'	G	1		x	x	x	

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		4.20.22 1634	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Adrian Baker
Company Name:	Ensolum LLC.	Company Name:	XTO Energy, Inc.
Address:	2351 W Northwest Hwy Suite 1203A	Address:	3104 E. Green Street
City, State ZIP:	Dallas, TX, 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337.257.8307	Email:	bbelill@ensolum.com; tmorrissey@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:	Los Medanos	Turn Around	
Project Number:	03E1558007	☐ Routine ☑ Rush	
Project Location:	CC: 2094371001	Due Date:	2 day TAT
Sampler's Name:	Conner Shore	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: CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021	Sample Comments
PH05	s	4/20/2022	1200	1'	G	1		x	x	x	
PH05	s	4/20/2022	1215	4'	G	1		x	x	x	
BH01	s	4/20/2022	1200	1'	G	1		x	x	x	
BH01	s	4/20/2022	1205	2'	G	1		x	x	x	
BH01	s	4/20/2022	1215	4'	G	1		x	x	x	

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	Cloe Cl	4.20.22 1634			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St
Carlsbad NM 88220
Phone. 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-716 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica.Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2221-1
Address: 1211 W Florida Ave	Due Date Requested: 4/25/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #			
Project Name: LOS MEDANOS	Project #: 89000093			
Site:	SSOW#:			

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
PH01 (890-2221-1)	4/20/22	09 30 Mountain		Solid			X	X	X	X	X	1	
PH01 (890-2221-2)	4/20/22	09 35 Mountain		Solid			X	X	X	X	X	1	
PH01 (890-2221-3)	4/20/22	09 45 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-2221-4)	4/20/22	10 00 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-2221-5)	4/20/22	10 05 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-2221-6)	4/20/22	10 15 Mountain		Solid			X	X	X	X	X	1	
PH03 (890-2221-7)	4/20/22	10 20 Mountain		Solid			X	X	X	X	X	1	
PH03 (890-2221-8)	4/20/22	10 35 Mountain		Solid			X	X	X	X	X	1	
PH04 (890-2221-9)	4/20/22	10 40 Mountain		Solid			X	X	X	X	X	1	

Note. Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time.	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Clue Cop 4.21.22					
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-716 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2221-1
Address: 1211 W Florida Ave	Due Date Requested: 4/25/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: LOS MEDANOS	Project #: 89000093			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH04 (890-2221-10)	4/20/22	10 55 Mountain		Solid			X	X	X	X	X	1	
PH05 (890-2221-11)	4/20/22	12 00 Mountain		Solid			X	X	X	X	X	1	
PH05 (890-2221-12)	4/20/22	12 15 Mountain		Solid			X	X	X	X	X	1	
BH01 (890-2221-13)	4/20/22	12 00 Mountain		Solid			X	X	X	X	X	1	
BH01 (890-2221-14)	4/20/22	12 05 Mountain		Solid			X	X	X	X	X	1	
BH01 (890-2221-15)	4/20/22	12 15 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Clae Coy 4.21.22	Date/Time:	Company:	Received by:	Date/Time: 4/21/22	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2221-1
SDG Number: 03E1558007

Login Number: 2221
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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2221-1
SDG Number: 03E1558007

Login Number: 2221
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 04/21/22 01:11 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").	True	

ENSOLUM

APPENDIX E

NMOCD Notifications

Green, Garrett J

From: Baker, Adrian
Sent: Friday, April 15, 2022 8:27 AM
To: ocd.enviro@state.nm.us; Bratcher, Mike, EMNRD; Nobui, Jennifer, EMNRD; Hensley, Chad, EMNRD; Hamlet, Robert, EMNRD
Cc: DelawareSpills /SM; Green, Garrett J
Subject: XTO Site Activities for the week of April 18th

Follow Up Flag: Follow up
Flag Status: Flagged

All,

XTO plans to complete final sampling activities at the following sites the week of April 18, 2022.

Tuesday
- JRU Legg / nAPP2204943884

Wednesday
- PLU RR 33-25-30 / nAPP2204125212
- Los Medanos / nAPP2204835360

Thursday
- Los Medanos / nAPP2204835360

Friday
- Pierce Canyon 32 / nAPP2205254615

Thank you,

Adrian Baker
Environmental Coordinator
Permian Business Unit

XTO Energy Inc.
6401 N. Holiday Hill Dr.
Midland, Tx 79707
Mobile:(432)-236-3808
adrian.baker@exxonmobil.com

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 103612

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 103612
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH. A variance is approved for 400 ft2 floor confirmation samples. Sidewall confirmation samples should be collected every 200 ft2. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. The work will need to occur in 90 days after the work plan has been approved.	6/27/2022