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	NAPP2218238639
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.25466 Longitude -103.60874
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Mis Amigos Battery	Site Type Tank Battery
Date Release Discovered 06/23/2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
O	31	23S	33E	Lea

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 70.00	Volume Recovered (bbls) 70.00
	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: Internal corrosion caused the water dump line to release fluids to impermeable containment. All fluids were recovered. A 48-hour advance liner inspection notice was sent to NMOCD District 1. Liner was visually inspected and determined not to be operating as designed. A third-party contractor has been retained for remediation purposes,

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2218238639
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? A release greater than 25 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, by Garrett Green to ocd.enviro@state.nm.us, Mike Bratcher, Robert Hamlet, Jennifer Nobui on 6/23/22 via email.

Initial Response

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

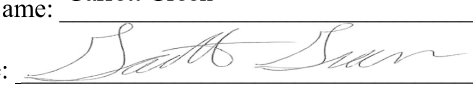
- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have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

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

NA

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

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

Printed Name: Garrett Green
Title: SSHE Coordinator
Signature: 
Date: 07/01/2022
email: garrett.green@exxonmobil.com
Telephone: 575-200-0729

OCD Only

Received by: Jocelyn Harimon
Date: 07/01/2022

Location:	Mis Amigos Battery	
Spill Date:	6/23/2022	
Area 1		
Approximate Area =	393.02	cu.ft.
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	70.00	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**70.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**70.00**	**bbls**

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

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

CONDITIONS

Action 122306

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 122306
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	7/1/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2218238639
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.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2218238639
District RP	
Facility ID	
Application ID	

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

Printed Name: _Garrett Green_____ Title: _Environmental Coordinator_____

Signature:_____ Date: ____09/21/2022_____

email: _garrett.green@exxonmobil.com_____ Telephone: ____575-200-0729_____

OCD Only

Received by: __Jocelyn Harimon_____ Date: __09/22/2022_____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2218238639
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

☒ Extents of contamination must be fully delineated.

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

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

Printed Name: Garrett Green Title: Environmental Coordinator

Signature: Garrett Green Date: 09/21/2022

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

OCD Only

Received by: Jocelyn Harimon Date: 09/22/2022

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

Signature: Jennifer Nobui Date: 09/26/2022

ENSOLUM

September 21, 2022

District I
New Mexico Oil Conservation Division
1625 N. French Dr.
Hobbs, New Mexico 88240

Re: Deferral Request
Mis Amigos Battery
Incident Number NAPP2218238639
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this Deferral Request to document site assessment and soil sampling activities at the Mis Amigos Battery (Site). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water within lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Deferral Request for Incident Number NAPP2218238639.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 31, Township 23 South, Range 33 East, in Lea County, New Mexico (32.25466° N, 103.60874°W) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On June 23, 2022, internal corrosion of a produced water dump line resulted in the release of approximately 70 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; all 70 bbls of released produced water were recovered from within the lined containment. A 48-hour advance notice of liner inspection was provided via email to the New Mexico Oil Conservation Division (NMOCD) District I office. A liner integrity inspection was conducted by XTO personnel following fluid recovery. Upon inspection, the liner was determined to be insufficient. XTO reported the release to the NMOCD via email on June 23, 2022 and submitted a Release Notification Form C-141 (Form C-141) on July 1, 2022. The release was assigned Incident Number NAPP2218238639. NMOCD notifications are included in Appendix A.

SITE CHARACTERIZATION 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.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. On July 20, 2021, a soil boring (C-04551) was drilled 0.21 miles west of the Site utilizing a truck-mounted hollow-stem auger rig. Soil boring C-4551 was drilled to a depth of 108 feet bgs. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activites. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 108 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. All wells used to determine depth to groundwater are depicted on Figure 1. The Well Record and Log is included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a seasonal dry wash, located approximately 8,868 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). Potential 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 TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT ACTIVITIES

On August 3, 2022 and August 17, 2022, Ensolum personnel visited the Site to evaluate the potential release extent based on information provided on the Form C-141 and conduct site assessment activities. One borehole (BH01) was advanced via hand auger near the location of the tear in the containment liner to assess the vertical extent of any impacted soil. Three delineation soil samples (BH01/BH01A/BH01B) were collected from the borehole at depths of approximately 0.5 feet, 1-foot, and 2 feet bgs, respectively. Four additional lateral delineation soil samples (SS01 through SS04) were collected around the lined containment at a depth of 0.5 feet bgs to confirm the a release did not extend outside the lined containment. The release extent/containment and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations from the borehole were documented on lithologic/soil sampling logs, which are included in Appendix C. The borehole BH01 was backfilled with the soil removed and XTO repaired the tear in the liner. The delineation soil sample locations are depicted on Figure 2. Photographic documentation is included in Appendix D.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported

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.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil sample BH01 at 0.5 feet bgs indicated that TPH-GRO/TPH-DRO and TPH concentrations exceeded the Closure Criteria. Laboratory analytical results for delineation soil sample BH01A collected at 1 foot bgs indicated TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria.

Laboratory analytical results for all other soil samples, including sample BH01B collected 2 feet below the tear in the liner and all lateral delineation samples, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, lateral delineation soil samples SS01 through SS04 were compliant with the most stringent Table 1 Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix E.

DEFERRAL REQUEST

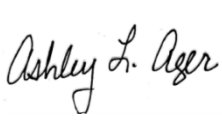
XTO is requesting deferral of final remediation due to the presence of active production equipment and surface pipelines within the lined containment preventing the removal of impacted soil. The impacted soil is limited to the area immediately beneath the lined containment, where remediation would require a major facility deconstruction. The impacted soil remaining in place is delineated vertically by delineation soil sample BH01B collected at 2 feet bgs. The soil is laterally delineated by delineation soil samples SS01 through SS04. A maximum of 60 cubic yards of TPH impacted soil remains in place beneath the liner assuming a maximum 2-foot depth based on the delineation soil samples listed above, that were compliant with the Closure Criteria.

XTO does not believe deferment will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was determined to be greater than 100 feet bgs, the release was contained laterally by the lined containment, and the impacted soil remaining in place is limited to the area immediately beneath the liner. The liner has been repaired by XTO and will limit future vertical migration of residual impacts.

Based on the presence of active production equipment within the release area and the complete lateral and vertical delineation of impacted soil remaining in place, XTO requests deferral of final remediation for Incident Number NAPP2218238639 until final reclamation of the well pad or major construction, whichever comes first.

If you have any questions or comments, please contact Ms. Ashley Ager at (970) 946-1093 or aager@ensolum.com.

Sincerely,
Ensolum, LLC



Benjamin J. Belill
Project Geologist

Ashley L. Ager, M.S., P.G.
Program Director

cc: Garrett Green, XTO
Shelby Pennington, XTO
New Mexico State Land Office

Appendices:

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

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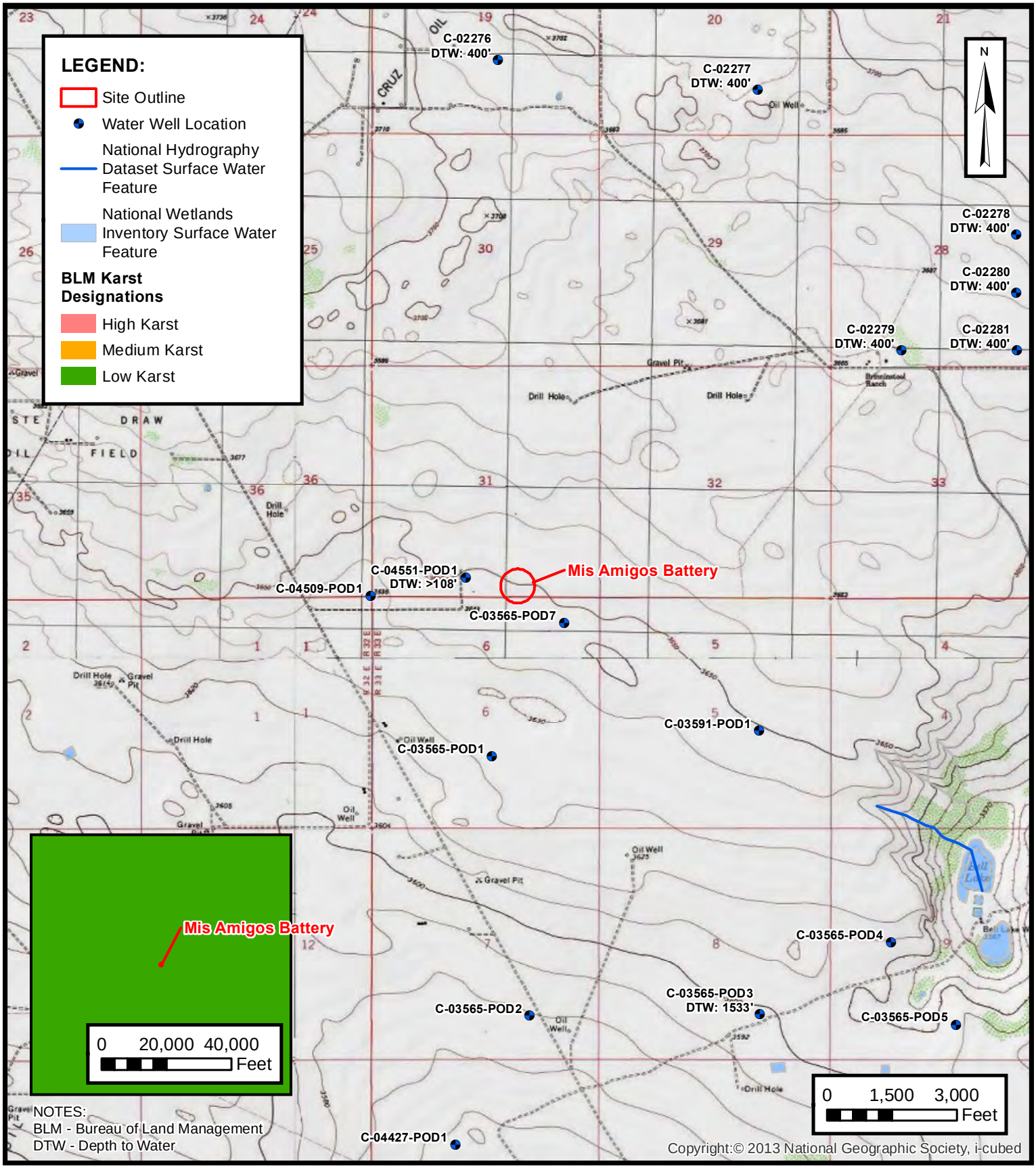
FIGURES



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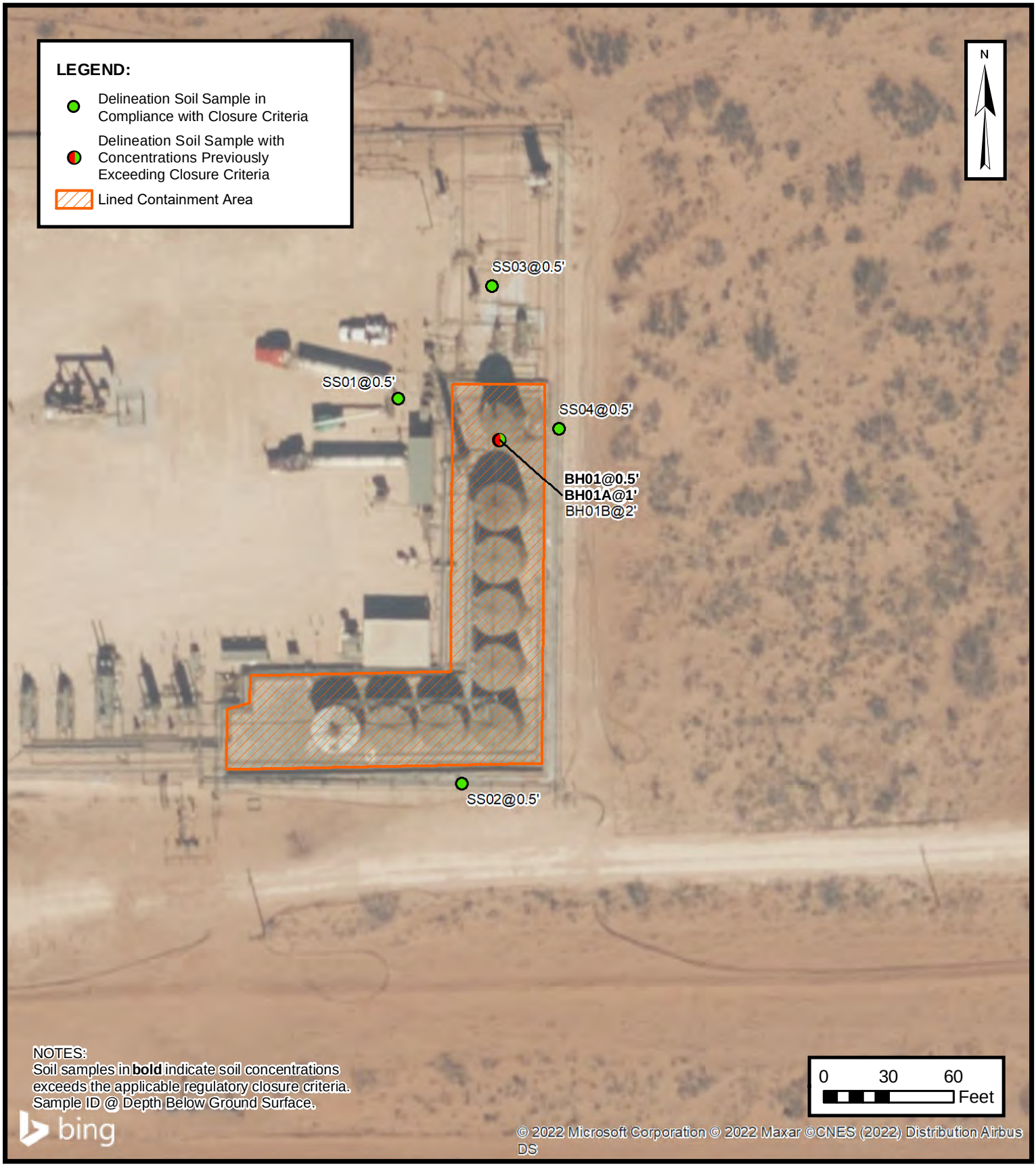
Environmental, Engineering and Hydrogeologic Consultants

SITE RECEPTOR MAP

XTO ENERGY, INC
MIS AMIGOS BATTERY
NAPP2218238639
Unit O, Sec 31, T23S, R33E
Lea County, New Mexico

FIGURE
1



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Environmental, Engineering and Hydrogeologic Consultants

DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
MIS AMIGOS BATTERY
NAPP2218238639
Unit O, Sec 31, T23S, R33E
Lea County, New Mexico

FIGURE

2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Mis Amigos Battery
XTO Energy, Inc.
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
SS01	08/03/2022	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	362
SS02	08/03/2022	0.5	<0.00199	0.0110	<49.9	<49.9	<49.9	<49.9	<49.9	15.2
SS03	08/03/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	<4.95
SS04	08/03/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	<5.02
BH01	08/17/2022	0.5	<0.00199	0.0525	471	4,670	<49.9	**5,141**	**5,140**	479
BH01A	08/17/2022	1	<0.00201	<0.00402	101	1,240	<50.0	**1,340**	1,340	517
BH01B	08/17/2022	2	<0.00202	<0.00404	<50.0	126	<50.0	126	126	89.9

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

ENSOLUM

APPENDIX A

NMOCD Notifications

Collins, Melanie

From: Green, Garrett J
Sent: Thursday, June 23, 2022 5:02 PM
To: ocd.enviro@state.nm.us; Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Nobui, Jennifer, EMNRD
Cc: DelawareSpills /SM
Subject: XTO 24 Hour Notification - Mis Amigos Battery - Released on 6/23/22

All,

This is notification of a release greater than 25 barrels that occurred today at the Mis Amigos Battery near the GPS coordinates given below. All of the fluids remained in containment and all standing fluids were recovered by vacuum truck. Details will be provided with a form C-141. Please contact us with any questions or concerns.

GPS: 32.25466, -103.60874

Thank you,

Garrett Green
Environmental Coordinator
Delaware Business Unit
(575) 200-0729
Garrett.Green@ExxonMobil.com

XTO Energy, Inc.
3104 E. Greene Street | Carlsbad, NM 88220 | M: (575)200-0729

Collins, Melanie

From: Green, Garrett J
Sent: Monday, June 27, 2022 2:20 PM
To: ocd.enviro@state.nm.us; Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Nobui, Jennifer, EMNRD
Cc: DelawareSpills /SM
Subject: XTO 48 Hour Liner Inpsection - Mis Amigos Battery - Released on 6/23/22

Good afternoon,

This is sent as a 48-hour notification, XTO is scheduled to inspect the lined containment at Mis Amigos Battery released on (6/23/22), on Wednesday, June 29, 2022, at 1:00pm MST. A 24 hour release notification was sent out on Thursday, June 23, 2022 5:02 PM since the release was greater than 25 barrels in volume. Please call us with any questions or concerns.

GPS Coordinates: (32.25466, -103.60874)

Thank you,

Garrett Green
Environmental Coordinator
Delaware Business Unit
(575) 200-0729
Garrett.Green@ExxonMobil.com

XTO Energy, Inc.
3104 E. Greene Street | Carlsbad, NM 88220 | M: (575)200-0729

ENSOLUM

APPENDIX B

Referenced Well Records

OSE DIT AUG 17 2021 PM3:03

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (BH-01)	n/a	C-4551

WELL OWNER NAME(S)	PHONE (OPTIONAL)
XTO Energy (Kyle Littrell)	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6401 Holiday Hill Dr.	Midland	TX	79707

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	15	18.36	N
	LONGITUDE	103	36	46.04	W

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

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

SE SW Sec. 31T23S R33E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
07/20/2021	07/20/2021	temporary well material	108	n/a

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): n/a

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	108	±6.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. C-4551	POD NO. 1	TRN NO. 699428	
LOCATION 23S.33E.31.443		WELL TAG ID NO.	PAGE 1 OF 2

OSE DIT AUG 17 2021 PM3:09

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	15	15	Sand,fine grain, poorly graded, moist, Reddish Brown	Y ✓ N	
15	40	25	Caliche, poorly consolidated, Tan-Off White	Y ✓ N	
40	45	5	Sand,medium-fine grain, poorly graded, trace caliche, Light Brown	Y ✓ N	
45	50	5	Clayey Sand, fine- medium grain , poorly graded, cohesive, Reddish Brown	Y ✓ N	
50	55	5	Sandy Clay, fine- medium grain , poorly graded, cohesive, Reddish Brown	Y ✓ N	
55	70	15	Claystone, poorly cemented, cohesive,Reddish brown,	Y ✓ N	
70	75	5	Clayey Sand, medium grain , poorly graded, cohesive, Light Brown	Y ✓ N	
75	80	5	Silty Sand, fine- very finegrain , poorly graded, cohesive, Light Brown	Y ✓ N	
80	85	5	Clayey Sand, fine- medium grain , poorly graded, cohesive, Light Brown	Y ✓ N	
85	100	15	Sandy Clay, poorly graded, cohesive, Reddish Brown	Y ✓ N	
100	105	5	Clay, low plasticity, cohesive, Brown-Blueish Gray, Dry	Y ✓ N	
105	108	3	Claystone, poorly cemented, cohesive,Reddish brown,dry	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

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

MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.

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

Shane Eldridge, Carmelo Trevino, Cameron Pruitt

6. SIGNATURE

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

Jack Atkins — Jackie D. Atkins — 08/13/2021

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4551	POD NO. 1	TRN NO. 699428	
LOCATION 23S-33E-31 443		WELL TAG ID NO.	PAGE 2 OF 2

ENSOLUM

APPENDIX C

Lithologic Soil Sampling Logs

ENSOLUM Environmental, Engineering and Hydrogeologic Consultants	Sample Name: BH01	Date: 8/17/2022
	Site Name: Mis Amigos Battery	
	Incident Number: NAPP2218238639	
	Job Number: 03E1558092	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: KP	Method: Hand Auger
Coordinates: 32.254857,-103.608744	Hole Diameter: 3.5"	Total Depth: 3'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE (fill)	0-1', CALICHE, moist, tan, very sandy, unconsolidated, light brown-brown stain, mild H/C odor, fill.
M	520	136	Y	BH01	0.5			
M	520	108	N	BH01A	1	1	SP	1-3', SAND, moist, reddish brown, fine grain, poorly graded, no stain, trace H/C odor.
								1.5'-3', no odor.
M	<112	18.0	N	BH01B	2	2		
M	<112	0.2	N		3	3	TD	Total depth at 3' bgs.
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

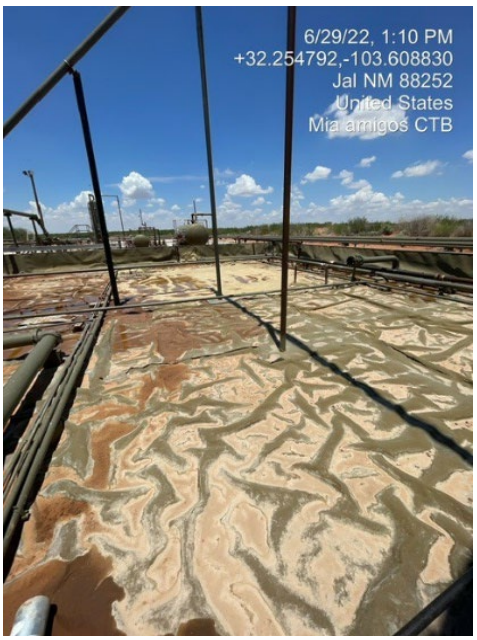
ENSOLUM

APPENDIX D

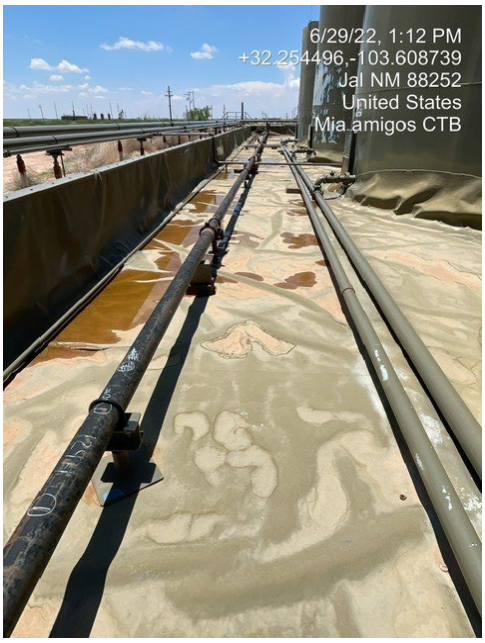
Photographic Log

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

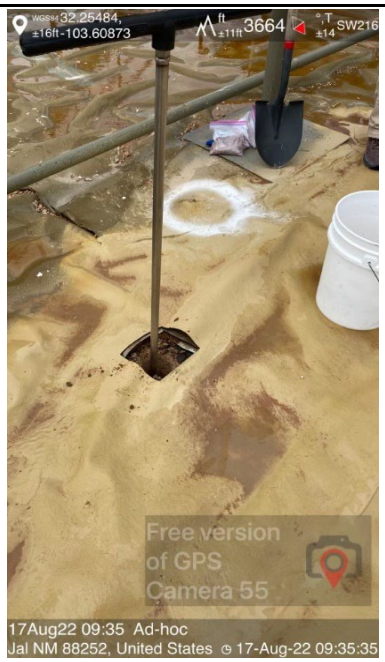
Photographic Log
XTO Energy, Inc
Mis Amigos Battery
Incident Number: NAPP2218238639
Ensolum Project Number: 03E1558092



Photograph 1
Date: June 29, 2022
Description: Liner Inspection Activities



Photograph 2
Date: June 29, 2022
Description: Liner Inspection Activities



Photograph 3
Date: August 17, 2022
Description: Delineation Activities

Photograph 4
Date: August 17, 2022
Description: Patched Liner

ENSOLUM

APPENDIX E

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: 890-2719-1
Laboratory Sample Delivery Group: 03E1558092
Client Project/Site: Mis Amigos CTB

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

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
8/15/2022 10:48:03 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: Mis Amigos CTB

Laboratory Job ID: 890-2719-1
SDG: 03E1558092

Table of Contents

Eurofins Carlsbad
8/15/2022

Definitions/Glossary

Client: Ensolum Job ID: 890-2719-1
Project/Site: Mis Amigos CTB SDG: 03E1558092

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

Job ID: 890-2719-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2719-1

Receipt
The sample was received on 8/4/2022 7:44 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-31570/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-31570 and analytical batch 880-31633 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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 880-31649 and analytical batch 880-31933 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: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

Client Sample ID: SS01

Date Collected: 08/03/22 13:00
Date Received: 08/04/22 07:44
Sample Depth: 0.5'

Lab Sample ID: 890-2719-1

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		08/08/22 13:23	08/10/22 23:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:23	08/10/22 23:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:23	08/10/22 23:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/08/22 13:23	08/10/22 23:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:23	08/10/22 23:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/08/22 13:23	08/10/22 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/08/22 13:23*	*08/10/22 23:09*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*08/08/22 13:23*	*08/10/22 23:09*	*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			08/11/22 10:28	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			08/08/22 11:44	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 *1	49.8		mg/Kg		08/05/22 10:50	08/06/22 13:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/05/22 10:50	08/06/22 13:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/05/22 10:50	08/06/22 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*08/05/22 10:50*	*08/06/22 13:48*	*1*
o-Terphenyl	*108*		*70 - 130*	*08/05/22 10:50*	*08/06/22 13:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**362**		5.00		mg/Kg			08/13/22 00:11	1

Surrogate Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

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)
880-17690-A-6-C MS	Matrix Spike	104	95
880-17690-A-6-D MSD	Matrix Spike Duplicate	105	98
890-2704-A-9-D MS	Matrix Spike	106	93
890-2704-A-9-E MSD	Matrix Spike Duplicate	102	103
890-2719-1	SS01	113	103
LCS 880-31768/1-A	Lab Control Sample	111	92
LCS 880-31769/1-A	Lab Control Sample	107	100
LCSD 880-31768/2-A	Lab Control Sample Dup	104	92
MB 880-31768/5-A	Method Blank	94	97
MB 880-31769/5-A	Method Blank	94	102

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2712-A-1-C MS	Matrix Spike	77	85
890-2712-A-1-D MSD	Matrix Spike Duplicate	92	101
890-2719-1	SS01	101	108
LCS 880-31570/2-A	Lab Control Sample	135 S1+	133 S1+
LCSD 880-31570/3-A	Lab Control Sample Dup	111	130
MB 880-31570/1-A	Method Blank	91	105

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31768/5-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31768

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 13:11	08/11/22 02:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*08/08/22 13:11*	*08/11/22 02:38*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/08/22 13:11*	*08/11/22 02:38*	*1*

Lab Sample ID: LCS 880-31768/1-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31768

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07179		mg/Kg		72	70 - 130		
Toluene			0.100	0.08341		mg/Kg		83	70 - 130		
Ethylbenzene			0.100	0.08799		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1838		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09228		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-31768/2-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31768

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07256		mg/Kg		73	70 - 130	1	35
Toluene			0.100	0.08266		mg/Kg		83	70 - 130	1	35
Ethylbenzene			0.100	0.08687		mg/Kg		87	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1804		mg/Kg		90	70 - 130	2	35
o-Xylene			0.100	0.09054		mg/Kg		91	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 890-2704-A-9-D MS
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.08508		mg/Kg		85	70 - 130		
Toluene	<0.00199	U	0.0998	0.09438		mg/Kg		95	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

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

Lab Sample ID: 890-2704-A-9-D MS
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.09810		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2010		mg/Kg		101	70 - 130
o-Xylene	<0.00199	U	0.0998	0.09903		mg/Kg		99	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 890-2704-A-9-E MSD
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31768

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1022		mg/Kg		102	70 - 130	18	35
Toluene	<0.00199	U	0.100	0.09599		mg/Kg		96	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.100	0.09685		mg/Kg		96	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1954		mg/Kg		97	70 - 130	3	35
o-Xylene	<0.00199	U	0.100	0.09572		mg/Kg		95	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 880-31769/5-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31769

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 13:23	08/10/22 14:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*08/08/22 13:23*	*08/10/22 14:40*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*08/08/22 13:23*	*08/10/22 14:40*	*1*

Lab Sample ID: LCS 880-31769/1-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31769

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09980		mg/Kg		100	70 - 130
Toluene	0.100	0.09571		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09946		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2046		mg/Kg		102	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

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

Lab Sample ID: LCS 880-31769/1-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31769

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09984		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-17690-A-6-C MS
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31769

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.09015		mg/Kg		90	70 - 130		
Toluene	<0.00201	U	0.100	0.09789		mg/Kg		97	70 - 130		
Ethylbenzene	<0.00201	U	0.100	0.09981		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene	<0.00402	U	0.201	0.2056		mg/Kg		102	70 - 130		
o-Xylene	<0.00201	U	0.100	0.1003		mg/Kg		100	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-17690-A-6-D MSD
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31769

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.08375		mg/Kg		84	70 - 130	7	35
Toluene	<0.00201	U	0.0998	0.08778		mg/Kg		88	70 - 130	11	35
Ethylbenzene	<0.00201	U	0.0998	0.08858		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1816		mg/Kg		91	70 - 130	12	35
o-Xylene	<0.00201	U	0.0998	0.08941		mg/Kg		90	70 - 130	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-31570/1-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31570

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		08/05/22 10:50	08/06/22 10:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 10:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 10:56	1

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

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

Lab Sample ID: MB 880-31570/1-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31570

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	08/05/22 10:50	08/06/22 10:56	1
o-Terphenyl	105		70 - 130	08/05/22 10:50	08/06/22 10:56	1

Lab Sample ID: LCS 880-31570/2-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31570

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1077		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1004		mg/Kg		100	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	133	S1+	70 - 130

Lab Sample ID: LCSD 880-31570/3-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31570

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	860.0	*1	mg/Kg		86	70 - 130	22	20
Diesel Range Organics (Over C10-C28)			1000	967.6		mg/Kg		97	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	130		70 - 130

Lab Sample ID: 890-2712-A-1-C MS
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31570

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 *1	999	994.7		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	709.9		mg/Kg		71	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	77		70 - 130
o-Terphenyl	85		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

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

Lab Sample ID: 890-2712-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31633 — **Prep Batch: 31570**

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 *1	999	840.2		mg/Kg		84	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	843.5		mg/Kg		84	70 - 130	17	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31649/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/12/22 19:54	1

Lab Sample ID: LCS 880-31649/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	255.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-31649/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.3		mg/Kg		105	90 - 110	3	20

Lab Sample ID: 880-17792-A-11-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	129	F1	253	427.2	F1	mg/Kg		118	90 - 110		

Lab Sample ID: 880-17792-A-11-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	129	F1	253	405.9		mg/Kg		110	90 - 110	5	20

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

GC VOA

Prep Batch: 31768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31768/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31768/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31768/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2704-A-9-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2704-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 31769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2719-1	SS01	Total/NA	Solid	5035	
MB 880-31769/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31769/1-A	Lab Control Sample	Total/NA	Solid	5035	
880-17690-A-6-C MS	Matrix Spike	Total/NA	Solid	5035	
880-17690-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 31904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2719-1	SS01	Total/NA	Solid	8021B	31769
MB 880-31768/5-A	Method Blank	Total/NA	Solid	8021B	31768
MB 880-31769/5-A	Method Blank	Total/NA	Solid	8021B	31769
LCS 880-31768/1-A	Lab Control Sample	Total/NA	Solid	8021B	31768
LCS 880-31769/1-A	Lab Control Sample	Total/NA	Solid	8021B	31769
LCSD 880-31768/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31768
880-17690-A-6-C MS	Matrix Spike	Total/NA	Solid	8021B	31769
880-17690-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31769
890-2704-A-9-D MS	Matrix Spike	Total/NA	Solid	8021B	31768
890-2704-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31768

Analysis Batch: 31984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2719-1	SS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 31570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2719-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-31570/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31570/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31570/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2712-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2712-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2719-1	SS01	Total/NA	Solid	8015B NM	31570
MB 880-31570/1-A	Method Blank	Total/NA	Solid	8015B NM	31570
LCS 880-31570/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31570
LCSD 880-31570/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31570
890-2712-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	31570
890-2712-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	31570

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

GC Semi VOA

Analysis Batch: 31745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2719-1	SS01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 31649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2719-1	SS01	Soluble	Solid	DI Leach	
MB 880-31649/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31649/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31649/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-17792-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-17792-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 31933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2719-1	SS01	Soluble	Solid	300.0	31649
MB 880-31649/1-A	Method Blank	Soluble	Solid	300.0	31649
LCS 880-31649/2-A	Lab Control Sample	Soluble	Solid	300.0	31649
LCSD 880-31649/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31649
880-17792-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	31649
880-17792-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	31649

Lab Chronicle

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

Client Sample ID: SS01

Date Collected: 08/03/22 13:00
Date Received: 08/04/22 07:44

Lab Sample ID: 890-2719-1

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			5.02 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 23:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31984	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31745	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 13:48	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	31649	08/06/22 16:57	CH	EET MID
Soluble	Analysis	300.0		1			31933	08/13/22 00:11	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

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

Protocol References:

ASTM = ASTM International

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:

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

Sample Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2719-1
SDG: 03E1558092

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2719-1	SS01	Solid	08/03/22 13:00	08/04/22 07:44	0.5'

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Tacoma Morrissey	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy, Inc
Address:	3122 National Parks Highway	Address:	3104 E Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307	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:	Mis Amigos CTB	Turn Around	☑ Routine ☐ Rush
Project Number:	03E1558092	Pres. Code	
Project Location:	32.25466, -103.6084	Due Date:	
Sampler's Name:	Meredith Roberts	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	Parameters
Samples Received Intact:	(Yes) No	Thermometer ID:	TNM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.8	
Total Containers:		Corrected Temperature:	5.6	

ANALYSIS REQUEST

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	BTEX	Chlorides	TPH	Sample Comments
SS01	S	8/3/22	1300	0.5'	Grab	1	X	X	X	Incident ID: nAPP2218238659
										Cost Center: 1053621001

MR

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	2	8.3.22 1650	3	4	
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2719-1
SDG Number: 03E1558092

Login Number: 2719
List Number: 1
Creator: Stutzman, Amanda

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: 890-2719-1
SDG Number: 03E1558092

Login Number: 2719
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/05/22 10:35 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2723-1
Laboratory Sample Delivery Group: 03E1558092
Client Project/Site: Mis Amigos CTB

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

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
8/12/2022 7:17:58 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: Mis Amigos CTB

Laboratory Job ID: 890-2723-1
SDG: 03E1558092

Table of Contents

Eurofins Carlsbad
8/12/2022

Definitions/Glossary

Client: Ensolum Job ID: 890-2723-1
Project/Site: Mis Amigos CTB SDG: 03E1558092

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

Job ID: 890-2723-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2723-1

Receipt
The sample was received on 8/4/2022 7:55 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-31801 and analytical batch 880-31685 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
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: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

Client Sample ID: SS02

Date Collected: 08/03/22 13:05
Date Received: 08/04/22 07:55
Sample Depth: 0.5'

Lab Sample ID: 890-2723-1

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		08/08/22 15:42	08/09/22 04:47	1
Toluene	**0.00277**		0.00199		mg/Kg		08/08/22 15:42	08/09/22 04:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/22 15:42	08/09/22 04:47	1
m-Xylene & p-Xylene	**0.00821**		0.00398		mg/Kg		08/08/22 15:42	08/09/22 04:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/22 15:42	08/09/22 04:47	1
Xylenes, Total	**0.00821**		0.00398		mg/Kg		08/08/22 15:42	08/09/22 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*08/08/22 15:42*	*08/09/22 04:47*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*08/08/22 15:42*	*08/09/22 04:47*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0110**		0.00398		mg/Kg			08/09/22 10:34	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			08/08/22 12:38	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		08/05/22 11:58	08/06/22 21:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/05/22 11:58	08/06/22 21:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/22 11:58	08/06/22 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*08/05/22 11:58*	*08/06/22 21:42*	*1*
o-Terphenyl	*97*		*70 - 130*	*08/05/22 11:58*	*08/06/22 21:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.2**		5.00		mg/Kg			08/11/22 17:57	1

Surrogate Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

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)
880-17833-A-1-A MS	Matrix Spike	106	94
880-17833-A-1-B MSD	Matrix Spike Duplicate	112	92
890-2723-1	SS02	105	89
LCS 880-31801/1-A	Lab Control Sample	103	97
LCSD 880-31801/2-A	Lab Control Sample Dup	106	97
MB 880-31680/5-A	Method Blank	98	90
MB 880-31801/5-A	Method Blank	104	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2723-1	SS02	87	97
890-2723-1 MS	SS02	89	90
890-2723-1 MSD	SS02	89	91
LCS 880-31577/2-A	Lab Control Sample	93	96
LCSD 880-31577/3-A	Lab Control Sample Dup	91	95
MB 880-31577/1-A	Method Blank	89	107

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31680/5-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31680

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 08:17	08/08/22 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/08/22 08:17*	*08/08/22 12:03*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/08/22 08:17*	*08/08/22 12:03*	*1*

Lab Sample ID: MB 880-31801/5-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31801

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 15:42	08/08/22 22:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/08/22 15:42*	*08/08/22 22:58*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*08/08/22 15:42*	*08/08/22 22:58*	*1*

Lab Sample ID: LCS 880-31801/1-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31801

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1012		mg/Kg		101	70 - 130		
Toluene			0.100	0.09868		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.1031		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2069		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1139		mg/Kg		114	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-31801/2-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31801

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09009		mg/Kg		90	70 - 130	12	35

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

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

Lab Sample ID: LCSD 880-31801/2-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31801

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08972		mg/Kg		90	70 - 130	10	35
Ethylbenzene			0.100	0.09649		mg/Kg		96	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.1946		mg/Kg		97	70 - 130	6	35
o-Xylene			0.100	0.1077		mg/Kg		108	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 880-17833-A-1-A MS
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31801

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.0998	0.05435	F1	mg/Kg		54	70 - 130
Toluene	<0.00201	U F1	0.0998	0.03513	F1	mg/Kg		35	70 - 130
Ethylbenzene	<0.00201	U F1	0.0998	0.02412	F1	mg/Kg		24	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.04804	F1	mg/Kg		24	70 - 130
o-Xylene	<0.00201	U F1 F2	0.0998	0.02474	F1	mg/Kg		25	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-17833-A-1-B MSD
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31801

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0996	0.04430	F1	mg/Kg		44	70 - 130	20	35
Toluene	<0.00201	U F1	0.0996	0.02686	F1	mg/Kg		27	70 - 130	27	35
Ethylbenzene	<0.00201	U F1	0.0996	0.01866	F1	mg/Kg		19	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.03797	F1	mg/Kg		19	70 - 130	23	35
o-Xylene	<0.00201	U F1 F2	0.0996	0.01578	F1 F2	mg/Kg		16	70 - 130	44	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

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

Lab Sample ID: MB 880-31577/1-A
Matrix: Solid
Analysis Batch: 31631

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31577

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		08/05/22 11:58	08/06/22 20:38	1

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

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

Lab Sample ID: MB 880-31577/1-A
Matrix: Solid
Analysis Batch: 31631

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31577

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		08/05/22 11:58	08/06/22 20:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 11:58	08/06/22 20:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*08/05/22 11:58*	*08/06/22 20:38*	*1*
o-Terphenyl	*107*		*70 - 130*	*08/05/22 11:58*	*08/06/22 20:38*	*1*

Lab Sample ID: LCS 880-31577/2-A
Matrix: Solid
Analysis Batch: 31631

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31577

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	922.7		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	901.7		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: LCSD 880-31577/3-A
Matrix: Solid
Analysis Batch: 31631

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31577

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	905.4		mg/Kg		91	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	879.0		mg/Kg		88	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: 890-2723-1 MS
Matrix: Solid
Analysis Batch: 31631

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 31577

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	1016		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	962.5		mg/Kg		94	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

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

Lab Sample ID: 890-2723-1 MSD
Matrix: Solid
Analysis Batch: 31631

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 31577

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	1031		mg/Kg		101	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	981.9		mg/Kg		96	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31560/1-A
Matrix: Solid
Analysis Batch: 31932

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			08/11/22 13:38	1

Lab Sample ID: LCS 880-31560/2-A
Matrix: Solid
Analysis Batch: 31932

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	248.4		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-31560/3-A
Matrix: Solid
Analysis Batch: 31932

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	248.0		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 890-2722-A-12-B MS
Matrix: Solid
Analysis Batch: 31932

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	200		250	458.6		mg/Kg		104	90 - 110		

Lab Sample ID: 890-2722-A-12-C MSD
Matrix: Solid
Analysis Batch: 31932

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	200		250	475.0		mg/Kg		110	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

GC VOA

Prep Batch: 31680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31680/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 31685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2723-1	SS02	Total/NA	Solid	8021B	31801
MB 880-31680/5-A	Method Blank	Total/NA	Solid	8021B	31680
MB 880-31801/5-A	Method Blank	Total/NA	Solid	8021B	31801
LCS 880-31801/1-A	Lab Control Sample	Total/NA	Solid	8021B	31801
LCSD 880-31801/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31801
880-17833-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	31801
880-17833-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31801

Prep Batch: 31801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2723-1	SS02	Total/NA	Solid	5035	
MB 880-31801/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31801/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31801/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-17833-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-17833-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 31844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2723-1	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 31577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2723-1	SS02	Total/NA	Solid	8015NM Prep	
MB 880-31577/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31577/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31577/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2723-1 MS	SS02	Total/NA	Solid	8015NM Prep	
890-2723-1 MSD	SS02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2723-1	SS02	Total/NA	Solid	8015B NM	31577
MB 880-31577/1-A	Method Blank	Total/NA	Solid	8015B NM	31577
LCS 880-31577/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31577
LCSD 880-31577/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31577
890-2723-1 MS	SS02	Total/NA	Solid	8015B NM	31577
890-2723-1 MSD	SS02	Total/NA	Solid	8015B NM	31577

Analysis Batch: 31760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2723-1	SS02	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

HPLC/IC

Leach Batch: 31560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2723-1	SS02	Soluble	Solid	DI Leach	
MB 880-31560/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31560/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31560/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2722-A-12-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2722-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 31932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2723-1	SS02	Soluble	Solid	300.0	31560
MB 880-31560/1-A	Method Blank	Soluble	Solid	300.0	31560
LCS 880-31560/2-A	Lab Control Sample	Soluble	Solid	300.0	31560
LCSD 880-31560/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31560
890-2722-A-12-B MS	Matrix Spike	Soluble	Solid	300.0	31560
890-2722-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	31560

Lab Chronicle

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

Client Sample ID: SS02

Date Collected: 08/03/22 13:05
Date Received: 08/04/22 07:55

Lab Sample ID: 890-2723-1

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			5.02 g	5 mL	31801	08/08/22 15:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31685	08/09/22 04:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31844	08/09/22 10:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			31760	08/08/22 12:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31577	08/05/22 11:58	DM	EET MID
Total/NA	Analysis	8015B NM		1			31631	08/06/22 21:42	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	31560	08/05/22 10:32	CH	EET MID
Soluble	Analysis	300.0		1			31932	08/11/22 17:57	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

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

Protocol References:

ASTM = ASTM International

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:

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

Sample Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2723-1
SDG: 03E1558092

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2723-1	SS02	Solid	08/03/22 13:05	08/04/22 07:55	0.5'

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Tacoma Morrissey	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy, Inc
Address:	3122 National Parks Highway	Address:	3104 E Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307 Email:		tmorrissey@ensolum.com

Work Order Comments

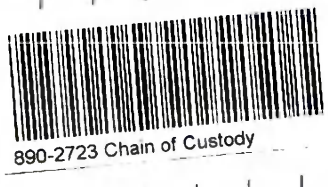
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Mis Amigos CTB	Turn Around	
Project Number:	03E1558092	☑ Routine ☐ Rush	
Project Location:	32.25466, 103.60874	Due Date:	
Sampler's Name:	Meredith Roberts	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	NM-009
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.8
Total Containers:		Corrected Temperature:	5.6

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX	Chlorides	TPH
SS02	S	8/3/22	1305	0.5'	Grab	1		X	X	X

ANALYSIS REQUEST



MR

Preservative Codes

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

Sample Comments

Incident ID: nAPP2218238639
Cost Center: 1055621001

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		8.3.22 1650	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2723-1
SDG Number: 03E1558092

Login Number: 2723
List Number: 1
Creator: Stutzman, Amanda

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: 890-2723-1
SDG Number: 03E1558092

Login Number: 2723
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/05/22 10:35 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2721-1
Laboratory Sample Delivery Group: 03E1558092
Client Project/Site: Mis Amigos CTB

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

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
8/15/2022 10:48:33 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: Mis Amigos CTB

Laboratory Job ID: 890-2721-1
SDG: 03E1558092

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-2721-1
Project/Site: Mis Amigos CTB SDG: 03E1558092

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

Job ID: 890-2721-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2721-1

Receipt
The sample was received on 8/4/2022 7:52 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-31801 and analytical batch 880-31685 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: Surrogate recovery for the following sample was outside control limits: (LCS 880-31570/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-31570 and analytical batch 880-31633 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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 880-31649 and analytical batch 880-31933 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: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

Client Sample ID: SS03

Date Collected: 08/03/22 13:10
Date Received: 08/04/22 07:52
Sample Depth: 0.5'

Lab Sample ID: 890-2721-1

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		08/08/22 15:42	08/09/22 04:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/09/22 04:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/09/22 04:27	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/08/22 15:42	08/09/22 04:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/09/22 04:27	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/08/22 15:42	08/09/22 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*08/08/22 15:42*	*08/09/22 04:27*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*08/08/22 15:42*	*08/09/22 04:27*	*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			08/09/22 10:34	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			08/08/22 11:44	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 *1	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*08/05/22 10:50*	*08/06/22 14:31*	*1*
o-Terphenyl	*106*		*70 - 130*	*08/05/22 10:50*	*08/06/22 14:31*	*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			08/13/22 00:20	1

Surrogate Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

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)
880-17833-A-1-A MS	Matrix Spike	106	94
880-17833-A-1-B MSD	Matrix Spike Duplicate	112	92
890-2721-1	SS03	127	89
LCS 880-31801/1-A	Lab Control Sample	103	97
LCSD 880-31801/2-A	Lab Control Sample Dup	106	97
MB 880-31680/5-A	Method Blank	98	90
MB 880-31801/5-A	Method Blank	104	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2712-A-1-C MS	Matrix Spike	77	85
890-2712-A-1-D MSD	Matrix Spike Duplicate	92	101
890-2721-1	SS03	96	106
LCS 880-31570/2-A	Lab Control Sample	135 S1+	133 S1+
LCSD 880-31570/3-A	Lab Control Sample Dup	111	130
MB 880-31570/1-A	Method Blank	91	105

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31680/5-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31680

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 08:17	08/08/22 12:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 08:17	08/08/22 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/08/22 08:17*	*08/08/22 12:03*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/08/22 08:17*	*08/08/22 12:03*	*1*

Lab Sample ID: MB 880-31801/5-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31801

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 15:42	08/08/22 22:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 15:42	08/08/22 22:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/08/22 15:42*	*08/08/22 22:58*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*08/08/22 15:42*	*08/08/22 22:58*	*1*

Lab Sample ID: LCS 880-31801/1-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31801

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1012		mg/Kg		101	70 - 130		
Toluene			0.100	0.09868		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.1031		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2069		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1139		mg/Kg		114	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-31801/2-A
Matrix: Solid
Analysis Batch: 31685

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31801

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09009		mg/Kg		90	70 - 130	12	35

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

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

Lab Sample ID: LCSD 880-31801/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31685 — **Prep Batch: 31801**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08972		mg/Kg		90	70 - 130	10	35
Ethylbenzene			0.100	0.09649		mg/Kg		96	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.1946		mg/Kg		97	70 - 130	6	35
o-Xylene			0.100	0.1077		mg/Kg		108	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 880-17833-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31685 — **Prep Batch: 31801**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.0998	0.05435	F1	mg/Kg		54	70 - 130
Toluene	<0.00201	U F1	0.0998	0.03513	F1	mg/Kg		35	70 - 130
Ethylbenzene	<0.00201	U F1	0.0998	0.02412	F1	mg/Kg		24	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.04804	F1	mg/Kg		24	70 - 130
o-Xylene	<0.00201	U F1 F2	0.0998	0.02474	F1	mg/Kg		25	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-17833-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31685 — **Prep Batch: 31801**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0996	0.04430	F1	mg/Kg		44	70 - 130	20	35
Toluene	<0.00201	U F1	0.0996	0.02686	F1	mg/Kg		27	70 - 130	27	35
Ethylbenzene	<0.00201	U F1	0.0996	0.01866	F1	mg/Kg		19	70 - 130	26	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.03797	F1	mg/Kg		19	70 - 130	23	35
o-Xylene	<0.00201	U F1 F2	0.0996	0.01578	F1 F2	mg/Kg		16	70 - 130	44	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

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

Lab Sample ID: MB 880-31570/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31633 — **Prep Batch: 31570**

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		08/05/22 10:50	08/06/22 10:56	1

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

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

Lab Sample ID: MB 880-31570/1-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31570

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		08/05/22 10:50	08/06/22 10:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 10:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*08/05/22 10:50*	*08/06/22 10:56*	*1*
o-Terphenyl	*105*		*70 - 130*	*08/05/22 10:50*	*08/06/22 10:56*	*1*

Lab Sample ID: LCS 880-31570/2-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31570

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1077		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1004		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*135*	*S1+*	*70 - 130*
o-Terphenyl	*133*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-31570/3-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31570

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	860.0	*1	mg/Kg		86	70 - 130	22	20
Diesel Range Organics (Over C10-C28)			1000	967.6		mg/Kg		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*111*		*70 - 130*
o-Terphenyl	*130*		*70 - 130*

Lab Sample ID: 890-2712-A-1-C MS
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31570

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 *1	999	994.7		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	709.9		mg/Kg		71	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*77*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

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

Lab Sample ID: 890-2712-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31633 — **Prep Batch: 31570**

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 *1	999	840.2		mg/Kg		84	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	843.5		mg/Kg		84	70 - 130	17	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31649/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/12/22 19:54	1

Lab Sample ID: LCS 880-31649/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	255.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-31649/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.3		mg/Kg		105	90 - 110	3	20

Lab Sample ID: 880-17792-A-11-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	129	F1	253	427.2	F1	mg/Kg		118	90 - 110		

Lab Sample ID: 880-17792-A-11-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 31933

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	129	F1	253	405.9		mg/Kg		110	90 - 110	5	20

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

GC VOA

Prep Batch: 31680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31680/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 31685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2721-1	SS03	Total/NA	Solid	8021B	31801
MB 880-31680/5-A	Method Blank	Total/NA	Solid	8021B	31680
MB 880-31801/5-A	Method Blank	Total/NA	Solid	8021B	31801
LCS 880-31801/1-A	Lab Control Sample	Total/NA	Solid	8021B	31801
LCSD 880-31801/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31801
880-17833-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	31801
880-17833-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31801

Prep Batch: 31801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2721-1	SS03	Total/NA	Solid	5035	
MB 880-31801/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31801/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31801/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-17833-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-17833-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 31843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2721-1	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 31570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2721-1	SS03	Total/NA	Solid	8015NM Prep	
MB 880-31570/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31570/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31570/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2712-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2712-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2721-1	SS03	Total/NA	Solid	8015B NM	31570
MB 880-31570/1-A	Method Blank	Total/NA	Solid	8015B NM	31570
LCS 880-31570/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31570
LCSD 880-31570/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31570
890-2712-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	31570
890-2712-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	31570

Analysis Batch: 31747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2721-1	SS03	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

HPLC/IC

Leach Batch: 31649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2721-1	SS03	Soluble	Solid	DI Leach	
MB 880-31649/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31649/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31649/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-17792-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-17792-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 31933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2721-1	SS03	Soluble	Solid	300.0	31649
MB 880-31649/1-A	Method Blank	Soluble	Solid	300.0	31649
LCS 880-31649/2-A	Lab Control Sample	Soluble	Solid	300.0	31649
LCSD 880-31649/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31649
880-17792-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	31649
880-17792-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	31649

Lab Chronicle

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

Client Sample ID: SS03

Date Collected: 08/03/22 13:10
Date Received: 08/04/22 07:52

Lab Sample ID: 890-2721-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	31801	08/08/22 15:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31685	08/09/22 04:27	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31843	08/09/22 10:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			31747	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 14:31	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	31649	08/06/22 16:57	CH	EET MID
Soluble	Analysis	300.0		1			31933	08/13/22 00:20	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

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

Protocol References:

ASTM = ASTM International

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:

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

Sample Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2721-1
SDG: 03E1558092

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2721-1	SS03	Solid	08/03/22 13:10	08/04/22 07:52	0.5'

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Tacoma Morrissey	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy, Inc
Address:	3122 National Parks Highway	Address:	3104 E Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307	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:	Mis Amigos CTB	Turn Around	Pres. Code
Project Number:	03E1558072	☑ Routine ☐ Rush	
Project Location:	32.25466, -103.60274	Due Date:	
Sampler's Name:	Meredith Roberts	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IWM-257
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.8
Total Containers:		Corrected Temperature:	5.6

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	BTEX	Chlorides	TPH
SS03	S	8/3/22	1310	0.5'	Grab	1	X	X	X

890-2721 Chain of Custody

Preservative Codes

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

Sample Comments

Incident ID: nAPP2218232639
Cost Center: 1055621001

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	Meredith Roberts	Clint Cluff	8.3.22 1658			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2721-1
SDG Number: 03E1558092

Login Number: 2721
List Number: 1
Creator: Stutzman, Amanda

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: 890-2721-1
SDG Number: 03E1558092

Login Number: 2721
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/05/22 10:35 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2720-1
Laboratory Sample Delivery Group: 03E1558092
Client Project/Site: Mis Amigos CTB

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

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
8/16/2022 8:56:03 AM

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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: Mis Amigos CTB

Laboratory Job ID: 890-2720-1
SDG: 03E1558092

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Mis Amigos CTB

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Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2720-1

Receipt
The sample was received on 8/4/2022 7:48 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-31570/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-31570 and analytical batch 880-31633 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-31559 and analytical batch 880-31937 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.

Client Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

Client Sample ID: SS04

Date Collected: 08/03/22 13:15
Date Received: 08/04/22 07:48
Sample Depth: 0.5'

Lab Sample ID: 890-2720-1

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		08/08/22 13:23	08/10/22 23:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:23	08/10/22 23:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:23	08/10/22 23:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/08/22 13:23	08/10/22 23:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:23	08/10/22 23:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/08/22 13:23	08/10/22 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*08/08/22 13:23*	*08/10/22 23:29*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*08/08/22 13:23*	*08/10/22 23:29*	*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			08/11/22 10:28	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			08/08/22 11:44	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 *1	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*08/05/22 10:50*	*08/06/22 14:09*	*1*
o-Terphenyl	*111*		*70 - 130*	*08/05/22 10:50*	*08/06/22 14:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.02	U	5.02		mg/Kg			08/12/22 08:23	1

Surrogate Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

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)
880-17690-A-6-C MS	Matrix Spike	104	95
880-17690-A-6-D MSD	Matrix Spike Duplicate	105	98
890-2704-A-9-D MS	Matrix Spike	106	93
890-2704-A-9-E MSD	Matrix Spike Duplicate	102	103
890-2720-1	SS04	105	100
LCS 880-31768/1-A	Lab Control Sample	111	92
LCS 880-31769/1-A	Lab Control Sample	107	100
LCSD 880-31768/2-A	Lab Control Sample Dup	104	92
MB 880-31768/5-A	Method Blank	94	97
MB 880-31769/5-A	Method Blank	94	102

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2712-A-1-C MS	Matrix Spike	77	85
890-2712-A-1-D MSD	Matrix Spike Duplicate	92	101
890-2720-1	SS04	100	111
LCS 880-31570/2-A	Lab Control Sample	135 S1+	133 S1+
LCSD 880-31570/3-A	Lab Control Sample Dup	111	130
MB 880-31570/1-A	Method Blank	91	105

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31768/5-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31768

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 02:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 13:11	08/11/22 02:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*08/08/22 13:11*	*08/11/22 02:38*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/08/22 13:11*	*08/11/22 02:38*	*1*

Lab Sample ID: LCS 880-31768/1-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31768

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07179		mg/Kg		72	70 - 130		
Toluene			0.100	0.08341		mg/Kg		83	70 - 130		
Ethylbenzene			0.100	0.08799		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1838		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09228		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-31768/2-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31768

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07256		mg/Kg		73	70 - 130	1	35
Toluene			0.100	0.08266		mg/Kg		83	70 - 130	1	35
Ethylbenzene			0.100	0.08687		mg/Kg		87	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1804		mg/Kg		90	70 - 130	2	35
o-Xylene			0.100	0.09054		mg/Kg		91	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 890-2704-A-9-D MS
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.08508		mg/Kg		85	70 - 130		
Toluene	<0.00199	U	0.0998	0.09438		mg/Kg		95	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

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

Lab Sample ID: 890-2704-A-9-D MS
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.09810		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2010		mg/Kg		101	70 - 130
o-Xylene	<0.00199	U	0.0998	0.09903		mg/Kg		99	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 890-2704-A-9-E MSD
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31768

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1022		mg/Kg		102	70 - 130	18	35
Toluene	<0.00199	U	0.100	0.09599		mg/Kg		96	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.100	0.09685		mg/Kg		96	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1954		mg/Kg		97	70 - 130	3	35
o-Xylene	<0.00199	U	0.100	0.09572		mg/Kg		95	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 880-31769/5-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31769

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:23	08/10/22 14:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 13:23	08/10/22 14:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*08/08/22 13:23*	*08/10/22 14:40*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*08/08/22 13:23*	*08/10/22 14:40*	*1*

Lab Sample ID: LCS 880-31769/1-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31769

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09980		mg/Kg		100	70 - 130
Toluene	0.100	0.09571		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09946		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2046		mg/Kg		102	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
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Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-31769/1-A
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31769

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09984		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-17690-A-6-C MS
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31769

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.09015		mg/Kg		90	70 - 130		
Toluene	<0.00201	U	0.100	0.09789		mg/Kg		97	70 - 130		
Ethylbenzene	<0.00201	U	0.100	0.09981		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene	<0.00402	U	0.201	0.2056		mg/Kg		102	70 - 130		
o-Xylene	<0.00201	U	0.100	0.1003		mg/Kg		100	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-17690-A-6-D MSD
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31769

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.08375		mg/Kg		84	70 - 130	7	35
Toluene	<0.00201	U	0.0998	0.08778		mg/Kg		88	70 - 130	11	35
Ethylbenzene	<0.00201	U	0.0998	0.08858		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1816		mg/Kg		91	70 - 130	12	35
o-Xylene	<0.00201	U	0.0998	0.08941		mg/Kg		90	70 - 130	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-31570/1-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31570

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		08/05/22 10:50	08/06/22 10:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 10:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/22 10:50	08/06/22 10:56	1

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QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

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

Lab Sample ID: MB 880-31570/1-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31570

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	08/05/22 10:50	08/06/22 10:56	1
o-Terphenyl	105		70 - 130	08/05/22 10:50	08/06/22 10:56	1

Lab Sample ID: LCS 880-31570/2-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31570

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1077		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1004		mg/Kg		100	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	133	S1+	70 - 130

Lab Sample ID: LCSD 880-31570/3-A
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31570

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	860.0	*1	mg/Kg		86	70 - 130	22	20
Diesel Range Organics (Over C10-C28)			1000	967.6		mg/Kg		97	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	130		70 - 130

Lab Sample ID: 890-2712-A-1-C MS
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31570

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 *1	999	994.7		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	709.9		mg/Kg		71	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	77		70 - 130
o-Terphenyl	85		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

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

Lab Sample ID: 890-2712-A-1-D MSD
Matrix: Solid
Analysis Batch: 31633

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31570

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 *1	999	840.2		mg/Kg		84	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	843.5		mg/Kg		84	70 - 130	17	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31559/1-A
Matrix: Solid
Analysis Batch: 31937

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			08/12/22 03:46	1

Lab Sample ID: LCS 880-31559/2-A
Matrix: Solid
Analysis Batch: 31937

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	245.2		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-31559/3-A
Matrix: Solid
Analysis Batch: 31937

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	247.1		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 890-2706-A-3-C MS
Matrix: Solid
Analysis Batch: 31937

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	198	F1	250	448.2		mg/Kg		100	90 - 110		

Lab Sample ID: 890-2706-A-3-D MSD
Matrix: Solid
Analysis Batch: 31937

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	198	F1	250	480.5	F1	mg/Kg		113	90 - 110	7	20

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

GC VOA

Prep Batch: 31768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31768/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31768/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31768/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2704-A-9-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2704-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 31769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2720-1	SS04	Total/NA	Solid	5035	
MB 880-31769/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31769/1-A	Lab Control Sample	Total/NA	Solid	5035	
880-17690-A-6-C MS	Matrix Spike	Total/NA	Solid	5035	
880-17690-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 31904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2720-1	SS04	Total/NA	Solid	8021B	31769
MB 880-31768/5-A	Method Blank	Total/NA	Solid	8021B	31768
MB 880-31769/5-A	Method Blank	Total/NA	Solid	8021B	31769
LCS 880-31768/1-A	Lab Control Sample	Total/NA	Solid	8021B	31768
LCS 880-31769/1-A	Lab Control Sample	Total/NA	Solid	8021B	31769
LCSD 880-31768/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31768
880-17690-A-6-C MS	Matrix Spike	Total/NA	Solid	8021B	31769
880-17690-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31769
890-2704-A-9-D MS	Matrix Spike	Total/NA	Solid	8021B	31768
890-2704-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31768

Analysis Batch: 31985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2720-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 31570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2720-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-31570/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31570/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31570/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2712-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2712-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2720-1	SS04	Total/NA	Solid	8015B NM	31570
MB 880-31570/1-A	Method Blank	Total/NA	Solid	8015B NM	31570
LCS 880-31570/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31570
LCSD 880-31570/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31570
890-2712-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	31570
890-2712-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	31570

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

GC Semi VOA

Analysis Batch: 31746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2720-1	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 31559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2720-1	SS04	Soluble	Solid	DI Leach	
MB 880-31559/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31559/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31559/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2706-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2706-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 31937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2720-1	SS04	Soluble	Solid	300.0	31559
MB 880-31559/1-A	Method Blank	Soluble	Solid	300.0	31559
LCS 880-31559/2-A	Lab Control Sample	Soluble	Solid	300.0	31559
LCSD 880-31559/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31559
890-2706-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	31559
890-2706-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	31559

Lab Chronicle

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

Client Sample ID: SS04
Date Collected: 08/03/22 13:15
Date Received: 08/04/22 07:48

Lab Sample ID: 890-2720-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31769	08/08/22 13:23	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/10/22 23:29	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31985	08/11/22 10:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			31746	08/08/22 11:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	31570	08/05/22 10:50	DM	EET MID
Total/NA	Analysis	8015B NM		1			31633	08/06/22 14:09	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	31559	08/05/22 10:29	CH	EET MID
Soluble	Analysis	300.0		1			31937	08/12/22 08:23	AJ	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

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

Protocol References:

ASTM = ASTM International
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:

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

Sample Summary

Client: Ensolum
Project/Site: Mis Amigos CTB

Job ID: 890-2720-1
SDG: 03E1558092

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2720-1	SS04	Solid	08/03/22 13:15	08/04/22 07:48	0.5'

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Tacoma Morrissey	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy, Inc
Address:	3122 National Parks Highway	Address:	3104 E Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307	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:	Mis Amigos CTB	Turn Around	☑ Routine ☐ Rush
Project Number:	05E1558092	Due Date:	
Project Location:	32.25966, -103.60274	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Meredith Roberts		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TDM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.8
Total Containers:		Corrected Temperature:	5.6

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX	Chlorides	TPH
SS04	S	8/3/22	1315	0.5'	G	1		X	X	X

MR

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: NaSO$_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID
nAPP2218238639

Cost Center
1055562100I

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		8-3-22 1650	4		
3			6		
5					

Revised Date: 08/25/2020 Rev: 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2720-1
SDG Number: 03E1558092

Login Number: 2720
List Number: 1
Creator: Stutzman, Amanda

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: 890-2720-1
SDG Number: 03E1558092

Login Number: 2720
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/05/22 10:35 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2775-1
Laboratory Sample Delivery Group: 03E1558092
Client Project/Site: Mis Amigos Battery

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

Attn: Ben Belill

JKramer

Authorized for release by:
8/30/2022 2:07:49 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: Mis Amigos Battery

Laboratory Job ID: 890-2775-1
SDG: 03E1558092

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Job ID: 890-2775-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2775-1

Receipt
The samples were received on 8/17/2022 4:13 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-32855 and analytical batch 880-33040 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: The laboratory control sample (LCS) associated with preparation batch 880-33066 and analytical batch 880-33149 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-33066/1-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-2764-A-4-E MS) and (890-2764-A-4-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-33066/1-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-32518 and analytical batch 880-32549 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
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-32575 and analytical batch 880-32882 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.The associated samples are: (880-18347-A-5-A), (880-18347-A-5-B MS) and (880-18347-A-5-C MSD).

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: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Client Sample ID: BH01

Date Collected: 08/17/22 09:20
Date Received: 08/17/22 16:13
Sample Depth: 0.5

Lab Sample ID: 890-2775-1
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		08/26/22 13:57	08/29/22 13:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/26/22 13:57	08/29/22 13:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/26/22 13:57	08/29/22 13:26	1
m-Xylene & p-Xylene	**0.0297**		0.00398		mg/Kg		08/26/22 13:57	08/29/22 13:26	1
o-Xylene	**0.0228**	*+	0.00199		mg/Kg		08/26/22 13:57	08/29/22 13:26	1
Xylenes, Total	**0.0525**		0.00398		mg/Kg		08/26/22 13:57	08/29/22 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*08/26/22 13:57*	*08/29/22 13:26*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*08/26/22 13:57*	*08/29/22 13:26*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0525**		0.00398		mg/Kg			08/29/22 12:44	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5140**		49.9		mg/Kg			08/22/22 12:32	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	**471**		49.9		mg/Kg		08/19/22 15:00	08/21/22 04:23	1
Diesel Range Organics (Over C10-C28)	**4670**		49.9		mg/Kg		08/19/22 15:00	08/21/22 04:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/19/22 15:00	08/21/22 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*08/19/22 15:00*	*08/21/22 04:23*	*1*
o-Terphenyl	*94*		*70 - 130*	*08/19/22 15:00*	*08/21/22 04:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**479**		4.98		mg/Kg			08/25/22 09:42	1

Client Sample ID: BH01A

Date Collected: 08/17/22 09:25
Date Received: 08/17/22 16:13
Sample Depth: 1

Lab Sample ID: 890-2775-2
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		08/24/22 14:35	08/27/22 14:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/24/22 14:35	08/27/22 14:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/24/22 14:35	08/27/22 14:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/24/22 14:35	08/27/22 14:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/24/22 14:35	08/27/22 14:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/24/22 14:35	08/27/22 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*08/24/22 14:35*	*08/27/22 14:48*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Client Sample ID: BH01A

Lab Sample ID: 890-2775-2
Matrix: Solid

Date Collected: 08/17/22 09:25
Date Received: 08/17/22 16:13
Sample Depth: 1

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*129*		*70 - 130*	*08/24/22 14:35*	*08/27/22 14:48*	*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			08/29/22 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1340**		50.0	mg/Kg			08/22/22 12:32	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	**101**		50.0	mg/Kg		08/19/22 15:00	08/21/22 04:45	1
Diesel Range Organics (Over C10-C28)	**1240**		50.0	mg/Kg		08/19/22 15:00	08/21/22 04:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/19/22 15:00	08/21/22 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*08/19/22 15:00*	*08/21/22 04:45*	*1*
o-Terphenyl	*82*		*70 - 130*	*08/19/22 15:00*	*08/21/22 04:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**517**		5.04	mg/Kg			08/25/22 09:50	1

Client Sample ID: BH01B

Lab Sample ID: 890-2775-3
Matrix: Solid

Date Collected: 08/17/22 09:30
Date Received: 08/17/22 16:13
Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		08/24/22 14:35	08/27/22 15:09	1
Toluene	<0.00202	U	0.00202	mg/Kg		08/24/22 14:35	08/27/22 15:09	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		08/24/22 14:35	08/27/22 15:09	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		08/24/22 14:35	08/27/22 15:09	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		08/24/22 14:35	08/27/22 15:09	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		08/24/22 14:35	08/27/22 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*08/24/22 14:35*	*08/27/22 15:09*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*08/24/22 14:35*	*08/27/22 15:09*	*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			08/29/22 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**126**		50.0	mg/Kg			08/22/22 12:32	1

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Client Sample Results

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Client Sample ID: BH01B

Date Collected: 08/17/22 09:30
Date Received: 08/17/22 16:13
Sample Depth: 2

Lab Sample ID: 890-2775-3

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		08/19/22 15:00	08/21/22 05:06	1
Diesel Range Organics (Over C10-C28)	**126**		50.0		mg/Kg		08/19/22 15:00	08/21/22 05:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/19/22 15:00	08/21/22 05:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*08/19/22 15:00*	*08/21/22 05:06*	*1*
o-Terphenyl	*102*		*70 - 130*	*08/19/22 15:00*	*08/21/22 05:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**89.9**		5.05		mg/Kg			08/25/22 09:58	1

Surrogate Summary

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2764-A-4-E MS	Matrix Spike	131 S1+	102
890-2764-A-4-F MSD	Matrix Spike Duplicate	135 S1+	107
890-2774-A-1-H MS	Matrix Spike	92	101
890-2774-A-1-I MSD	Matrix Spike Duplicate	91	109
890-2775-1	BH01	116	96
890-2775-2	BH01A	75	129
890-2775-3	BH01B	71	119
LCS 880-32855/1-A	Lab Control Sample	88	104
LCS 880-33066/1-A	Lab Control Sample	136 S1+	107
LCSD 880-32855/2-A	Lab Control Sample Dup	93	100
LCSD 880-33066/2-A	Lab Control Sample Dup	129	103
MB 880-32705/5-B	Method Blank	80	118
MB 880-32855/5-A	Method Blank	78	123
MB 880-33066/5-A	Method Blank	104	97

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)
890-2761-A-1-C MS	Matrix Spike	97	81
890-2761-A-1-D MSD	Matrix Spike Duplicate	99	84
890-2775-1	BH01	101	94
890-2775-2	BH01A	97	82
890-2775-3	BH01B	124	102
LCS 880-32518/2-A	Lab Control Sample	88	77
LCSD 880-32518/3-A	Lab Control Sample Dup	99	85
MB 880-32518/1-A	Method Blank	102	92

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-32705/5-B
Matrix: Solid
Analysis Batch: 33040

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32705

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/22/22 15:07	08/27/22 01:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/22/22 15:07	08/27/22 01:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/22/22 15:07	08/27/22 01:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/22/22 15:07	08/27/22 01:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/22/22 15:07	08/27/22 01:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/22/22 15:07	08/27/22 01:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*08/22/22 15:07*	*08/27/22 01:22*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*08/22/22 15:07*	*08/27/22 01:22*	*1*

Lab Sample ID: MB 880-32855/5-A
Matrix: Solid
Analysis Batch: 33040

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32855

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/24/22 14:35	08/27/22 13:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/24/22 14:35	08/27/22 13:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/24/22 14:35	08/27/22 13:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/24/22 14:35	08/27/22 13:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/24/22 14:35	08/27/22 13:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/24/22 14:35	08/27/22 13:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*08/24/22 14:35*	*08/27/22 13:18*	*1*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*	*08/24/22 14:35*	*08/27/22 13:18*	*1*

Lab Sample ID: LCS 880-32855/1-A
Matrix: Solid
Analysis Batch: 33040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32855

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1054		mg/Kg		105	70 - 130		
Toluene			0.100	0.09762		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.09054		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.1665		mg/Kg		83	70 - 130		
o-Xylene			0.100	0.08925		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-32855/2-A
Matrix: Solid
Analysis Batch: 33040

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32855

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09749		mg/Kg		97	70 - 130	8	35

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

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

Lab Sample ID: LCSD 880-32855/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 33040 — **Prep Batch: 32855**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09902		mg/Kg		99	70 - 130	1	35
Ethylbenzene			0.100	0.09664		mg/Kg		97	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.1774		mg/Kg		89	70 - 130	6	35
o-Xylene			0.100	0.09451		mg/Kg		95	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-2774-A-1-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 33040 — **Prep Batch: 32855**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1002		mg/Kg		100	70 - 130
Toluene	<0.00200	U	0.100	0.08603		mg/Kg		86	70 - 130
Ethylbenzene	<0.00200	U F1	0.100	0.06428	F1	mg/Kg		64	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.201	0.09212	F1	mg/Kg		46	70 - 130
o-Xylene	<0.00200	U F1	0.100	0.06101	F1	mg/Kg		61	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-2774-A-1-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 33040 — **Prep Batch: 32855**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0998	0.1123		mg/Kg		113	70 - 130	11	35
Toluene	<0.00200	U	0.0998	0.09676		mg/Kg		97	70 - 130	12	35
Ethylbenzene	<0.00200	U F1	0.0998	0.07774		mg/Kg		78	70 - 130	19	35
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.1288	F1	mg/Kg		65	70 - 130	33	35
o-Xylene	<0.00200	U F1	0.0998	0.07397		mg/Kg		74	70 - 130	19	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: MB 880-33066/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 33149 — **Prep Batch: 33066**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/26/22 13:57	08/29/22 10:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/26/22 13:57	08/29/22 10:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/26/22 13:57	08/29/22 10:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/26/22 13:57	08/29/22 10:40	1

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

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

Lab Sample ID: MB 880-33066/5-A
Matrix: Solid
Analysis Batch: 33149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33066

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/26/22 13:57	08/29/22 10:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/26/22 13:57	08/29/22 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/26/22 13:57*	*08/29/22 10:40*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/26/22 13:57*	*08/29/22 10:40*	*1*

Lab Sample ID: LCS 880-33066/1-A
Matrix: Solid
Analysis Batch: 33149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33066

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09853		mg/Kg		99	70 - 130		
Toluene			0.100	0.09518		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.1064		mg/Kg		106	70 - 130		
m-Xylene & p-Xylene			0.200	0.2309		mg/Kg		115	70 - 130		
o-Xylene			0.100	0.1327	*+	mg/Kg		133	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-33066/2-A
Matrix: Solid
Analysis Batch: 33149

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33066

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08926		mg/Kg		89	70 - 130	10	35
Toluene			0.100	0.08870		mg/Kg		89	70 - 130	7	35
Ethylbenzene			0.100	0.09570		mg/Kg		96	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.2062		mg/Kg		103	70 - 130	11	35
o-Xylene			0.100	0.1188		mg/Kg		119	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2764-A-4-E MS
Matrix: Solid
Analysis Batch: 33149

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33066

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0998	0.08168		mg/Kg		82	70 - 130		
Toluene	<0.00200	U	0.0998	0.07833		mg/Kg		78	70 - 130		
Ethylbenzene	<0.00200	U	0.0998	0.08599		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1844		mg/Kg		92	70 - 130		
o-Xylene	<0.00200	U *+	0.0998	0.1055		mg/Kg		106	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

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

Lab Sample ID: 890-2764-A-4-E MS
Matrix: Solid
Analysis Batch: 33149

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33066

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-2764-A-4-F MSD
Matrix: Solid
Analysis Batch: 33149

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33066

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.08570		mg/Kg		85	70 - 130	5	35
Toluene	<0.00200	U	0.100	0.07939		mg/Kg		79	70 - 130	1	35
Ethylbenzene	<0.00200	U	0.100	0.08984		mg/Kg		89	70 - 130	4	35
m-Xylene & p-Xylene	<0.00401	U	0.201	0.1878		mg/Kg		94	70 - 130	2	35
o-Xylene	<0.00200	U *+	0.100	0.1073		mg/Kg		107	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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

Lab Sample ID: MB 880-32518/1-A
Matrix: Solid
Analysis Batch: 32549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32518

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		08/19/22 15:00	08/20/22 20:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/19/22 15:00	08/20/22 20:12	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/19/22 15:00	08/20/22 20:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	08/19/22 15:00	08/20/22 20:12	1
o-Terphenyl	92		70 - 130	08/19/22 15:00	08/20/22 20:12	1

Lab Sample ID: LCS 880-32518/2-A
Matrix: Solid
Analysis Batch: 32549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32518

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	795.1		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	711.8		mg/Kg		71	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	77		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

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

Lab Sample ID: LCSD 880-32518/3-A
Matrix: Solid
Analysis Batch: 32549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32518

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	874.5		mg/Kg		87	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	795.9		mg/Kg		80	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Lab Sample ID: 890-2761-A-1-C MS
Matrix: Solid
Analysis Batch: 32549

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 32518

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	1062		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	684	F1	999	723.0	F1	mg/Kg		4	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

Lab Sample ID: 890-2761-A-1-D MSD
Matrix: Solid
Analysis Batch: 32549

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 32518

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	1094		mg/Kg		106	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	684	F1	998	731.6	F1	mg/Kg		5	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*84*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32575/1-A
Matrix: Solid
Analysis Batch: 32882

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			08/25/22 06:18	1

QC Sample Results

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-32575/2-A
Matrix: Solid
Analysis Batch: 32882

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	237.6		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-32575/3-A
Matrix: Solid
Analysis Batch: 32882

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	237.7		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 880-18347-A-5-B MS
Matrix: Solid
Analysis Batch: 32882

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	222	F1 F2	249	354.8	F1	mg/Kg		53	90 - 110		

Lab Sample ID: 880-18347-A-5-C MSD
Matrix: Solid
Analysis Batch: 32882

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	222	F1 F2	249	464.4	F2	mg/Kg		98	90 - 110	27	20

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

GC VOA

Prep Batch: 32705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-32705/5-B	Method Blank	Total/NA	Solid	5035	

Prep Batch: 32855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-2	BH01A	Total/NA	Solid	5035	
890-2775-3	BH01B	Total/NA	Solid	5035	
MB 880-32855/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-32855/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-32855/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2774-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
890-2774-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 33040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-2	BH01A	Total/NA	Solid	8021B	32855
890-2775-3	BH01B	Total/NA	Solid	8021B	32855
MB 880-32705/5-B	Method Blank	Total/NA	Solid	8021B	32705
MB 880-32855/5-A	Method Blank	Total/NA	Solid	8021B	32855
LCS 880-32855/1-A	Lab Control Sample	Total/NA	Solid	8021B	32855
LCSD 880-32855/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	32855
890-2774-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	32855
890-2774-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	32855

Prep Batch: 33066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-1	BH01	Total/NA	Solid	5035	
MB 880-33066/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33066/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33066/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2764-A-4-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2764-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 33149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-1	BH01	Total/NA	Solid	8021B	33066
MB 880-33066/5-A	Method Blank	Total/NA	Solid	8021B	33066
LCS 880-33066/1-A	Lab Control Sample	Total/NA	Solid	8021B	33066
LCSD 880-33066/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33066
890-2764-A-4-E MS	Matrix Spike	Total/NA	Solid	8021B	33066
890-2764-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33066

Analysis Batch: 33225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-1	BH01	Total/NA	Solid	Total BTEX	
890-2775-2	BH01A	Total/NA	Solid	Total BTEX	
890-2775-3	BH01B	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

GC Semi VOA

Prep Batch: 32518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-1	BH01	Total/NA	Solid	8015NM Prep	
890-2775-2	BH01A	Total/NA	Solid	8015NM Prep	
890-2775-3	BH01B	Total/NA	Solid	8015NM Prep	
MB 880-32518/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32518/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32518/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2761-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2761-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 32549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-1	BH01	Total/NA	Solid	8015B NM	32518
890-2775-2	BH01A	Total/NA	Solid	8015B NM	32518
890-2775-3	BH01B	Total/NA	Solid	8015B NM	32518
MB 880-32518/1-A	Method Blank	Total/NA	Solid	8015B NM	32518
LCS 880-32518/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32518
LCSD 880-32518/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32518
890-2761-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	32518
890-2761-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	32518

Analysis Batch: 32653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-1	BH01	Total/NA	Solid	8015 NM	
890-2775-2	BH01A	Total/NA	Solid	8015 NM	
890-2775-3	BH01B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 32575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-1	BH01	Soluble	Solid	DI Leach	
890-2775-2	BH01A	Soluble	Solid	DI Leach	
890-2775-3	BH01B	Soluble	Solid	DI Leach	
MB 880-32575/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32575/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32575/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18347-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18347-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 32882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2775-1	BH01	Soluble	Solid	300.0	32575
890-2775-2	BH01A	Soluble	Solid	300.0	32575
890-2775-3	BH01B	Soluble	Solid	300.0	32575
MB 880-32575/1-A	Method Blank	Soluble	Solid	300.0	32575
LCS 880-32575/2-A	Lab Control Sample	Soluble	Solid	300.0	32575
LCSD 880-32575/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32575
880-18347-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	32575
880-18347-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	32575

Lab Chronicle

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Client Sample ID: BH01

Date Collected: 08/17/22 09:20
Date Received: 08/17/22 16:13

Lab Sample ID: 890-2775-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33066	08/26/22 13:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33149	08/29/22 13:26	EL	EET MID
Total/NA	Analysis	Total BTEX		1			33225	08/29/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32653	08/22/22 12:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32518	08/19/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1			32549	08/21/22 04:23	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32575	08/21/22 17:21	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	32882	08/25/22 09:42	SMC	EET MID

Client Sample ID: BH01A

Date Collected: 08/17/22 09:25
Date Received: 08/17/22 16:13

Lab Sample ID: 890-2775-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	32855	08/24/22 14:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33040	08/27/22 14:48	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33225	08/29/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32653	08/22/22 12:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32518	08/19/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1			32549	08/21/22 04:45	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32575	08/21/22 17:21	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	32882	08/25/22 09:50	SMC	EET MID

Client Sample ID: BH01B

Date Collected: 08/17/22 09:30
Date Received: 08/17/22 16:13

Lab Sample ID: 890-2775-3
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			4.95 g	5 mL	32855	08/24/22 14:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33040	08/27/22 15:09	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33225	08/29/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32653	08/22/22 12:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32518	08/19/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1			32549	08/21/22 05:06	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	32575	08/21/22 17:21	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	32882	08/25/22 09:58	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

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

Protocol References:

ASTM = ASTM International

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:

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

Sample Summary

Client: Ensolum
Project/Site: Mis Amigos Battery

Job ID: 890-2775-1
SDG: 03E1558092

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2775-1	BH01	Solid	08/17/22 09:20	08/17/22 16:13	0.5
890-2775-2	BH01A	Solid	08/17/22 09:25	08/17/22 16:13	1
890-2775-3	BH01B	Solid	08/17/22 09:30	08/17/22 16:13	2

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Chain of Custody

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

Work Order No: _____

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

Work Order Comments

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

Project Name:	Mis Amigos Battery	Turn Around	☑ Routine ☐ Rush
Project Number:	03E1558092	Due Date:	
Project Location:	32.25466,-103.60874	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Samples Received Intact:	(Yes) No	Thermometer ID:	Thm.009
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.4
Total Containers:		Corrected Temperature:	5.2

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021
BH01	S	8/17/2022	9:20	0.5'				x	x	x
BH01A	S	8/17/2022	9:25	1'				x	x	x
BH01B	S	8/17/2022	9:30	2'				x	x	x
BH01C (HOLD)	S	8/17/2022	9:35	3'				x	x	x

890-2775 Chain of Custody

Preservative Codes

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

Sample Comments

Incident ID:
nAPP2218238639
Cost Center:
1055621001
AFE:

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

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			8.17.22 1613			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2775-1
SDG Number: 03E1558092

Login Number: 2775
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: 890-2775-1
SDG Number: 03E1558092

Login Number: 2775
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/19/22 10:36 AM

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

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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 145426

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 145426
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Deferral Request Approved. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. The OCD will not close a release, where contaminants are left in place, due to close proximity to equipment. The incident will only be closed after all contaminated soil has been remediated to meet OCD Spill Rule Standards.	9/26/2022