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	NAPP2213151424
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 6401 Holiday Hill Rd Bldg 5, Midland, Texas, 79707	

Location of Release Source

Latitude 32.29070 Longitude -103.86159
(NAD 83 in decimal degrees to 5 decimal places)

Site Name BEU Connector PW Booster	Site Type pipeline
Date Release Discovered 04/27/2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
H	22	23S	30E	Eddy

Surface Owner: [x] 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)
[x] Produced Water	Volume Released (bbls) 296.34	Volume Recovered (bbls) 0.00
	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 A flanged-end fitting separated from a hose, releasing fluids to soil. A third-party contractor has been retained for remediation purposes.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2213151424
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 equal to or 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 Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Victoria Venegas; ocd.enviro@state.nm.us on Thursday, April 28, 2022 5:39 PM via email.

Initial Response

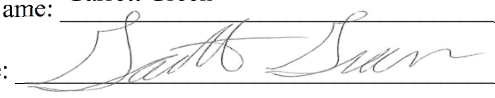
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- ☒ 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: 05/09/2022
email: garrett.green@exxonmobil.com
Telephone: 575-200-0729

OCD Only

Received by: Jocelyn Harimon
Date: 05/11/2022

Location:	BEU Connector PW Booster	
Spill Date:	4/27/2022	

Area 1		
Approximate Area =	16882.00	sq. ft.
Average Saturation (or depth) of spill =	5.00	inches
Average Porosity Factor =	0.20	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	250.56	bbls

Area 2		
Approximate Area =	9616.00	sq. ft.
Average Saturation (or depth) of spill =	2.00	inches

Average Porosity Factor =	0.15	

VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	42.82	bbls

Area 3		
Approximate Area =	8869.00	sq. ft.
Average Saturation (or depth) of spill =	0.75	inches

Average Porosity Factor =	0.03	

VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	2.96	bbls

TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**296.34**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**0.00**	**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

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 106123
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	5/11/2022

Incident ID	NAPP2213151424
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

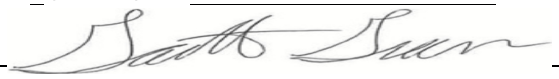
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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	NAPP2213151424
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: Oct 26 2023

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

OCD Only

Received by: Shelly Wells Date: 10/26/2023

Incident ID	NAPP2213151424
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:  Date: Oct 26 2023

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

OCD Only

Received by: Shelly Wells Date: 10/26/2023

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

Signature: Date:

ENSOLUM

October 25, 2023

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

Re: Remediation Work Plan Update
BEU Connector PW Booster and Mobley Ranch
Incident Numbers NAPP2213151424 and NAPP2316045229
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Remediation Work Plan Update (Update)* to document assessment activities completed to date and provide an update on remedial actions to address impacted soil identified at the BEU Connector PW Booster (Site). In addition, this *Update* includes information on a recent release, the Mobley Ranch, which will be addressed concurrently and included as the "Site" for future discussions below.

RELEASE SUMMARY AND BACKGROUND

The Site is located in Unit H, Section 22, Township 23 South, Range 30 East, in Eddy County, New Mexico (32.29070°, -103.86159°) and is associated with oil and gas exploration and production operations on New Mexico State Trust Land (STL) managed by the New Mexico State Land Office (NMSLO).

On April 27, 2022, a flanged-end fitting separated from a hose and resulted in the release of 296.34 barrels (bbls) of produced water onto the pipeline right-of-way (ROW) and pasture area. No fluids were recovered. XTO immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on April 28, 2022, and submitted a Release Notification Form C-141 (Form C-141) on May 9, 2022. The release was assigned Incident Number NAPP2213151424.

In August 2022, following approval of a Right-of-Entry (ROE) request for land access from NMSLO, Ensolum personnel completed delineation of the release. The delineation soil sampling results indicated soil contained elevated chloride concentrations in a 30,000 square foot area. A *Remediation Work Plan* (*Work Plan)* was submitted on October 24, 2022, proposing excavation of impacted soil identified during delineation activities and requested a sampling variance. The *Work Plan* was approved by the NMOCD on February 28, 2023, with the following conditions:

- *Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC.*
- *Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site assessment/characterization/proven depth to water determination.*
- *Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release.*

- *The variance for confirmation samples every 500 is approved. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH.*

Following approval of the *Work Plan*, XTO requested ROE access from the NMSLO, as well as an Archaeological Records Management Section (ARMS) review to ensure compliance with the Cultural Properties Protection (CPP) Rule, published after submittal of the *Work Plan*. While access to the Site was pending approval, a second release occurred in the area, overlapping Incident Number NAPP2213151424.

On May 27, 2023, a gasket failed on pump discharge piping and resulted in the release of 9.04 barrels (bbls) of produced water onto the pipeline ROW and pasture area. Approximately 2 bbls of produced water were recovered. XTO reported the release to the NMOCD and submitted a Form C-141 on June 9, 2023. The release was assigned Incident Number nAPP2316045229. The release overlapped the release extent for Incident Number NAPP2213151424. XTO proposes to address both releases concurrently.

CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1. Based on the results of the Site Characterization and approval by the NMOCD, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

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

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

SITE ACTIVITIES

The Mobley Ranch release was mapped using a handheld Global Positioning System (GPS) unit. Photographic documentation is provided in the Photographic log in Appendix A. The release extent is depicted on Figure 2. The ARMS review was completed and confirmed the area had been previously surveyed and no cultural properties were identified in the vicinity of the release and potential disturbance areas. An NMSLO Cultural Resources Cover Sheet documenting the results of the ARMS review was submitted to the Cultural Resource Office (CRO) of NMSLO on September 21, 2023. In addition, ongoing pipeline operations at the Site delayed the start of excavation; however, XTO recognizes the importance of remediating impacted soil at the Site and as such, pipeline construction work has been postponed in order to complete the excavation of impacted soil.

Ensolum personnel returned to the Site on October 17, 2023, to begin excavation of impacted soil. Currently, impacted soil has been excavated with the use of a track hoe and transport vehicles. Due to the extent of underground flowlines within the release extent, a hydrovac has been utilized to identify subsurface lines to prevent another environmental release, which has extended the excavation timeline. An area of approximately 16,200 square feet has been excavated at the time of this report, which includes the proper removal and disposal of approximately 1,000 cubic yards of soil. Photographic documentation of the excavation has been conducted and a Photographic Log is in Appendix A.

PROPOSED REMEDIATION WORK PLAN

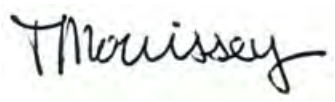
XTO proposes to continue excavation to remove impacted soil identified at the Site. XTO proposes to address Incident Numbers NAPP2213151424 and NAPP2316045229 by completing the following approved remediation activities:

- Excavation of chloride impacted soil. The proposed excavation extent is depicted on Figure 2.
- Collect confirmation samples at the approved sampling frequency of one 5-point composite soil sample every 500 square feet along the excavation floor and sidewalls.
- A total estimated 1,500 cubic yards of chloride impacted soil will be excavated (1,000 cubic yards have been removed to-date). The excavated soil will be transported to a New Mexico approved landfill facility for disposal.
- The excavation will be backfilled and recontoured to match pre-existing conditions and re-seeded with the recommended seed mixture as discussed below.

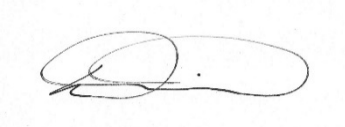
PROPOSED SCHEDULE

XTO will continue the excavation and confirmation soil sampling activities and will submit a *Closure Request* within 30 days following the receipt of final laboratory analytical results. If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely,
Ensolum, LLC



Tacoma Morrissey, MS
Senior Geologist



Daniel R. Moir, PG
Senior Managing Geologist

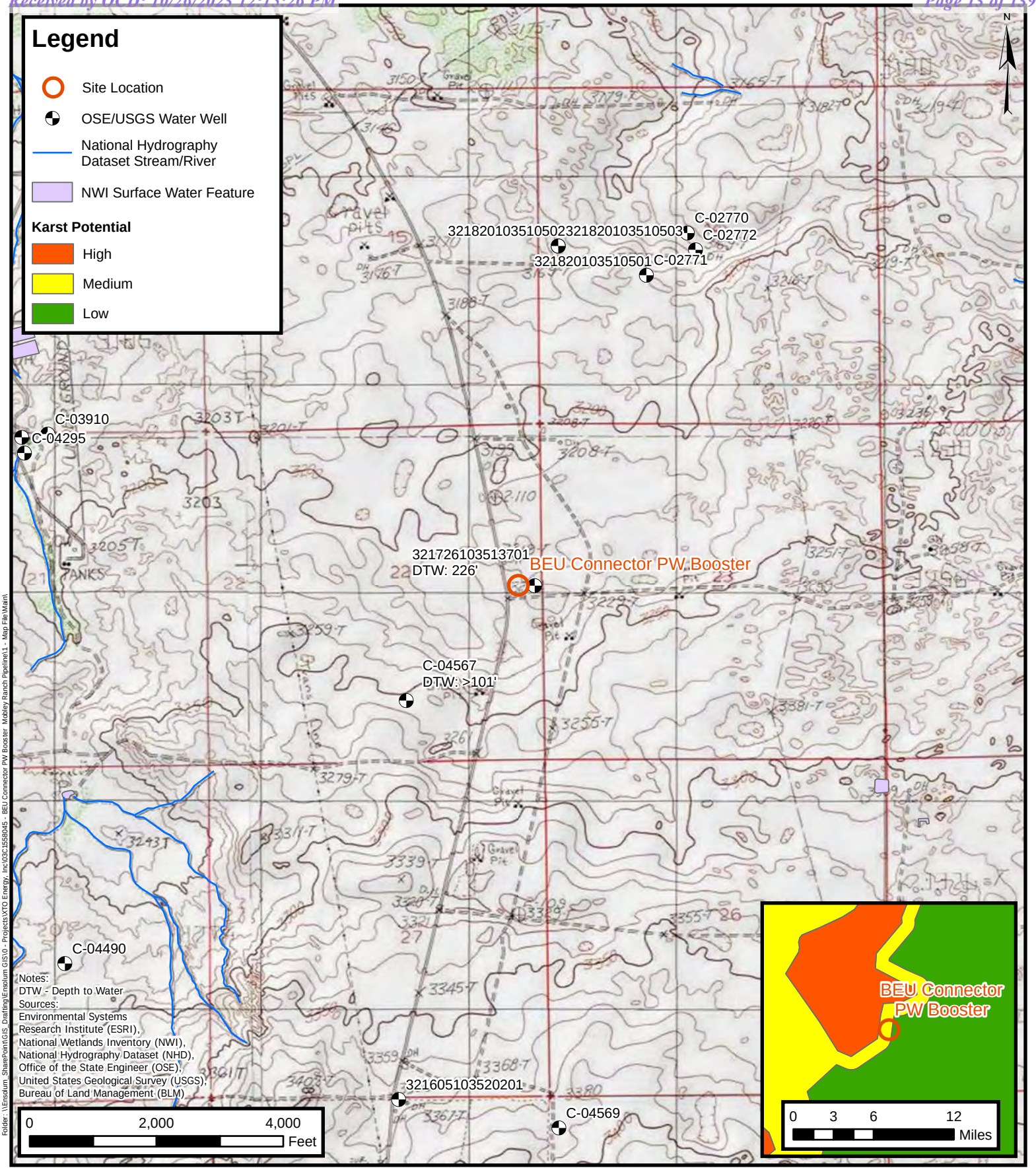
cc: Garrett Green, XTO
Tommee Lambert, XTO
New Mexico State Land Office

Appendices:

Figure 1 Site Location Map
Figure 2 Proposed Excavation Extent

ENSOLUM

FIGURES



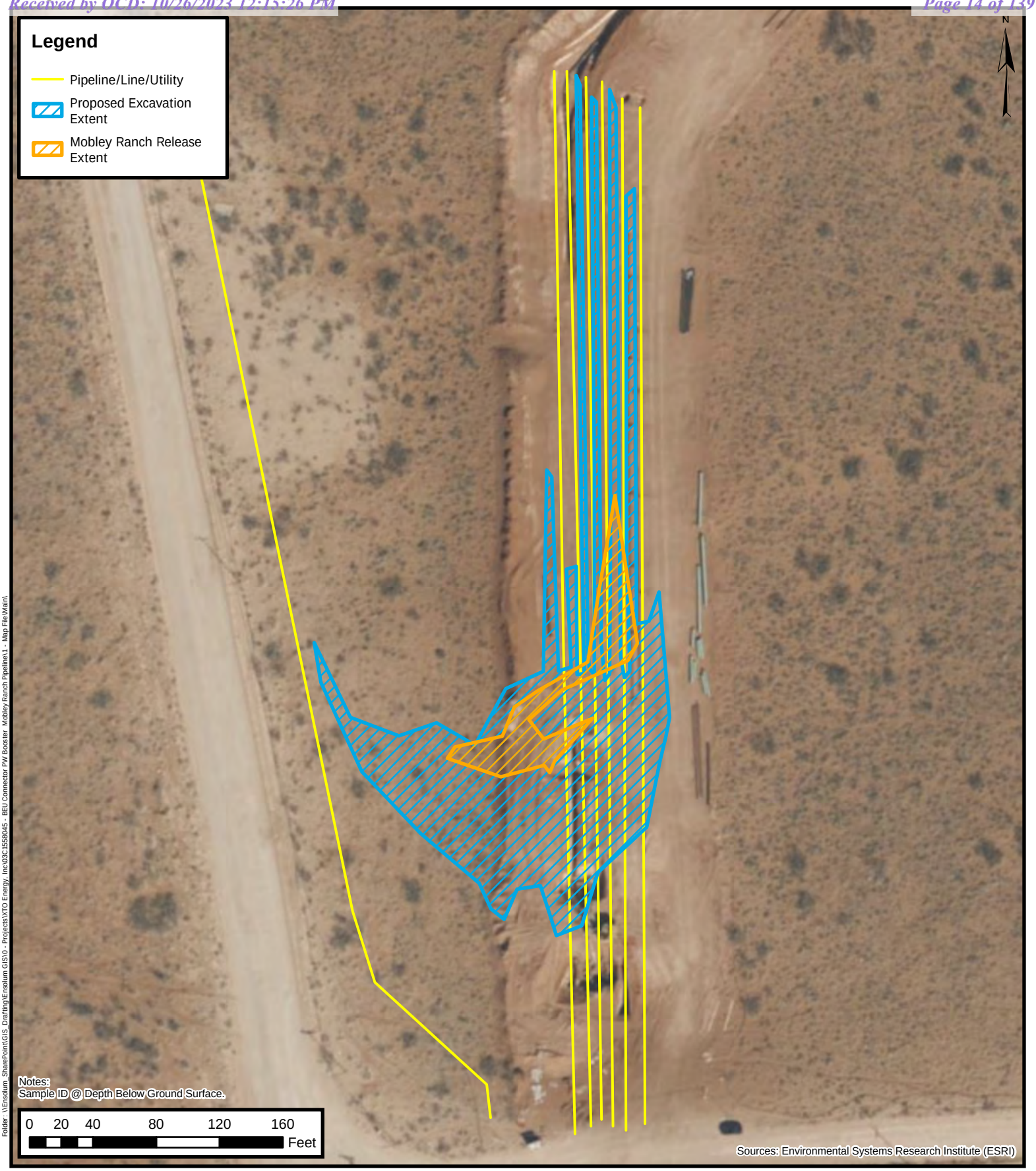
Folder: \\Ensolum SharePoint\GIS_Drafting\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558045 - BEU Connector PW Booster Mobley Ranch Pipeline\1 - Map File\Main\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

XTO Energy, Inc
BEU Connector PW Booster Mobley Ranch
Incident Number: nAPP2213151424 & nAPP2316045229
Unit H, Sec 22, T23S, R30E
Eddy Co, New Mexico, United States

FIGURE 1



Folder: \\Ensolum_SharePoint\GIS_Drafting\Ensolum GIS\10 - Projects\XTO Energy, Inc\03C1558045 - BEU Connector PW Booster Mobley Ranch Pipeline\1 - Map File\Main\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Proposed Excavation Extent

XTO Energy, Inc
BEU Connector PW Booster & Mobley Ranch
Incident Number: nAPP2213151424 & nAPP2316045229
Unit H, Sec 22, T23S, R30E
Eddy Co, New Mexico, United States

FIGURE 2

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APPENDIX A

Photographic Log

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Photographic Log
XTO Energy, Inc.
BEU Connector PW Booster and Mobley Ranch

Incident Numbers NAPP2213151424 and NAPP2316045229

Photograph: 1 Date: 4/28/2022
Description: Soil staining in NAPP2213151424 release
View: North

Photograph: 2 Date: 8/1/2022
Description: Soil staining in NAPP2316045229 release
View: Northeast

Photograph: 3 Date: 10/23/2023
Description: Ongoing excavation activities
View: Southwest

Photograph: 4 Date: 10/25/2023
Description: Ongoing excavation activities
View: North

ENSOLUM

APPENDIX B

NMOCD Notifications

From: Collins, Melanie
To: Tacoma Morrissey; Ashley Ager
Cc: Green, Garrett J; DelawareSpills /SM
Subject: FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 153127
Date: Tuesday, February 28, 2023 12:19:07 PM
Attachments: image001.png

[**EXTERNAL EMAIL**]

Work Plan approval for BEU Connector PW Booster, released 4/27/22.

Melanie Collins
XTO ENERGY
Environmental Technician
melanie.collins@exxonmobil.com
432-556-3756

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, February 28, 2023 12:15 PM
To: Collins, Melanie <melanie.collins@exxonmobil.com>
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 153127

External Email - Think Before You Click

To whom it may concern (c/o Melanie Collins for XTO ENERGY, INC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2213151424, with the following conditions:

- **The Remediation Plan is Conditionally Approved. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The variance for confirmation samples every 500 ft2 is approved. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. The work will need to occur in 90 days after the work plan has been approved.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

From: Collins, Melanie
To: ocd.enviro (ocd.enviro@emnrd.nm.gov); Hamlet, Robert, EMNRD (Robert.Hamlet@emnrd.nm.gov); Bratcher, Michael, EMNRD (mike.bratcher@emnrd.nm.gov); Harimon, Jocelyn, EMNRD (Jocelyn.Harimon@emnrd.nm.gov)
Cc: Tacoma Morrissey; Green, Garrett J; Ashley Ager; DelawareSpills /SM
Subject: XTO - Extension Request - BEU Connector PW Booster - Incident Number NAPP2213151424
Date: Friday, May 26, 2023 10:02:15 AM
Attachments: image001.png

[**EXTERNAL EMAIL**]

All,
XTO is requesting an extension of the current deadline of May 29, 2023, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the BEU Connector PW Booster (Incident Number NAPP2213151424). The release occurred on April 27, 2022, and fluids were released into a pipeline right-of-way (ROW). Initial site assessment and delineation sampling has been completed at the site. A work plan was submitted to the OCD on October 24, 2022 and approved by the NMOCD on February 28, 2023. A Right-of-Entry (ROE) permit must be executed and approved by the State Land Office (SLO) to access the ROW. In order to obtain the approved ROW, complete the remediation work and submit a closure report XTO requests a 90-day extension of this deadline until August 28, 2023.
Thank you,

Melanie Collins
XTO ENERGY
Environmental Technician
melanie.collins@exxonmobil.com
432-556-3756

From: Wells, Shelly, EMNRD
To: Collins, Melanie; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD
Cc: Green, Garrett J; Ben Belill; Tacoma Morrissey; Lambert, Tommee L; DelawareSpills /SM
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 10/16/23 - 10/20/23)
Date: Thursday, October 12, 2023 3:26:07 PM
Attachments: image001.png

Some people who received this message don't often get email from shelly.wells@emnrd.nm.gov. Learn why this is important

[**EXTERNAL EMAIL**]

Hi Melanie,

The OCD has received your notification. Notification requirements are **two full business days**, per rule. When reporting sampling at multiple locations it is required to provide the anticipated start time for each location. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to ensure inclusion in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Thursday, October 12, 2023 2:14 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>; bbelill@ensolum.com; Tacoma Morrissey <tmorrissey@ensolum.com>; Lambert, Tommee L <tommee.l.lambert@exxonmobil.com>; DelawareSpills /SM <DelawareSpills@exxonmobil.com>
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 10/16/23 - 10/20/23)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

XTO plans to complete final sampling activities at the sites listed below for the week of October 16,

2023.

Monday – October 16, 2023

- BEU Connector PW Booster / nAPP2213151424
- Mobley Ranch Pipeline / nAPP2316045229
- PLU 18 TWR Sat Battery / nAPP2230551957

Tuesday - October 17, 2023

- BEU Connector PW Booster / nAPP2213151424
- Mobley Ranch Pipeline / nAPP2316045229

Wednesday - October 18, 2023

- BEU Connector PW Booster / nAPP2213151424
- Mobley Ranch Pipeline / nAPP2316045229

Thursday - October 19, 2023

- BEU Connector PW Booster / nAPP2213151424
- Mobley Ranch Pipeline / nAPP2316045229
- PLU 23 Dog Town Draw 154H / nAPP2316446382

Friday - October 20, 2023

- BEU Connector PW Booster / nAPP2213151424
- Mobley Ranch Pipeline / nAPP2316045229

Thank you,

Melanie Collins

XTO ENERGY

Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756

From: Wells, Shelly, EMNRD
To: Collins, Melanie; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD; Hall, Brittany, EMNRD
Cc: Green, Garrett J; Ben Belill; Lambert, Tommee L; DelawareSpills /SM; Tacoma Morrissey
Subject: RE: [EXTERNAL] XTO Sampling notifications Week of 10.23.23-10.27.23
Date: Wednesday, October 18, 2023 4:58:27 PM
Attachments: image001.png

> Some people who received this message don't often get email from shelly.wells@emnrd.nm.gov. Learn why this is important

[**EXTERNAL EMAIL**]

Hi Melanie,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Wednesday, October 18, 2023 3:16 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>; bbelill@ensolum.com; Lambert, Tommee L <tommee.l.lambert@exxonmobil.com>; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Tacoma Morrissey <tmorrissey@ensolum.com>
Subject: [EXTERNAL] XTO Sampling notifications Week of 10.23.23-10.27.23

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Ok, Shelly, ask and you shall receive—haha! Let me know if you'd like them sent individually in the future, or if it is ok to send in bulk like this.

XTO plans to complete final sampling activities at the sites listed below for the week of October 23.2023 between 8 a.m. and 5 p.m. Please reach out with questions or concerns.
Thank you!

Site Name	BEU Connector PW Booster
Location	H-22-23S-30E; Eddy County, NM
Incident ID	nAPP2213151424
Source & Description of Activities	Sampling
Expected Duration for Activities	5 Days (10.23.23-10.27.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Site Name	Mobley Ranch Pipeline
Location	H-22-23S-30E; Eddy County, NM
Incident ID	nAPP2316045229
Source & Description of Activities	Sampling
Expected Duration for Activities	5 Days (10.23.23-10.27.23)
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	SLO

Site Name	JRU 91 Flowline
Location	K-36-22S-30E; Eddy County, NM
Incident ID	NAB1515234386
Source & Description of Activities	Sampling
Expected Duration for Activities	1 Day 10.23.2023
Env Consultant	Ensolum
Contractor	NA
Sampling Notification Required	Yes
Surface Owner	SLO

Site Name	Remuda 4-24-20

Location	A-04-24S-30E; Eddy County, NM
Incident ID	nAPP2233351770
Source & Description of Activities	Sampling
Expected Duration for Activities	1 Day 10.23.2023
Env Consultant	Ensolum
Contractor	NA
Sampling Notification Required	Yes
Surface Owner	BLM

Site Name	PLU CVX JV BS 008H
Location	N-14-25S-30E; Eddy County, NM
Incident ID	nAB1602154960
Source & Description of Activities	Sampling
Expected Duration for Activities	1 Day 10.24.2023
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	BLM

Site Name	Poker Lake Unit 315H
Location	P-24-24S-30E; Eddy County, NM
Incident ID	nAPP2324233432
Source & Description of Activities	Sampling
Expected Duration for Activities	3 Days 10.25.23-10.27.23
Env Consultant	Ensolum
Contractor	Tex Mex
Sampling Notification Required	Yes
Surface Owner	BLM

Thank you,

Melanie Collins

XTO ENERGY

From:	Hamlet, Robert, EMNRD
To:	Collins, Melanie Suzanne
Cc:	Green, Garrett J; DelawareSpills /SM; Ben Belill; Ashley Ager; Tacoma Morrissey; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD; Velez, Nelson, EMNRD
Subject:	Final Extension - XTO - BEU Connector PW Booster & Mobley Ranch Pipeline - Incident Numbers (nAPP2213151424 & nAPP2316045229)
Date:	Thursday, August 24, 2023 8:53:03 AM
Attachments:	image003.png

[**EXTERNAL EMAIL**]

RE: Incident #**NAPP2213151424 & NAPP2316045229**

Melanie,

Your request for an extension to **October 27th, 2023** is approved. This will be the **Final Extension** for this release. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet ● Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Wednesday, August 23, 2023 4:25 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] XTO - Extension Request - BEU Connector PW Booster & Mobley Ranch Pipeline - Incident Numbers (nAPP2213151424 & nAPP2316045229)

From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Wednesday, August 23, 2023 3:02 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; bbelill@ensolum.com; Ashley Ager <aager@ensolum.com>; Tacoma Morrissey <tmorrissey@ensolum.com>
Subject: [EXTERNAL] XTO - Extension Request - BEU Connector PW Booster & Mobley Ranch Pipeline

- Incident Numbers (nAPP2213151424 & nAPP2316045229)

All,

XTO is requesting an extension of the current deadline of August 28, 2023, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the BEU Connector PW Booster site (Incident Number nAPP2213151424) and an extension of the current deadline of August 25, 2023, for the Mobley Ranch pipeline release (Incident Number nAPP2316045229). The BEU Connector release occurred on April 27, 2022, and as a result, fluids were released into a pasture area off-pad. An initial site assessment and delineation sampling has been completed for this release. A Remediation Work Plan was submitted to the OCD on October 24, 2022, and approved by the division on February 28, 2023. The second release (Mobley Ranch Pipeline) occurred on May 27, 2023, and overlapped the BEU Connector PW Booster release. A Right-of-Entry (ROE) permit was approved by the State Land Office (SLO) for both releases on August 21, 2023, and an excavation has been scheduled with third-party contractors. In order to complete the excavation that now includes a second release, conduct confirmation sampling, review laboratory analytical data, and to submit a remediation work plan or closure report, XTO hereby requests a 60-day extension of the aforementioned deadlines to October 27, 2023.

Thank you,

Melanie Collins

XTO ENERGY

Environmental Technician
melanie.collins@exxonmobil.com
432-556-3756

ENSOLUM

APPENDIX C

Remediation Work Plan October 24, 2022

ENSOLUM

October 24, 2022

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

Re: Remediation Work Plan
BEU Connector PW Booster
Incident Number NAPP2213151424
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Remediation Work Plan* to document the site assessment activities completed to date and propose a work plan to address impacted soil identified at the BEU Connector PW Booster (Site). The purpose of the site assessment activities was to delineate the lateral and vertical extent of impacted soil resulting from a release of produced water at the Site. The following Work Plan proposes to excavate impacted soil within the top 4 feet of the release extent.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit H, Section 22, Township 23 South, Range 30 East, in Eddy County, New Mexico (32.29070° N, 103.86159° W) and is associated with oil and gas exploration and production operations on New Mexico State Land (SLO).

On April 27, 2022, a flanged-end fitting separated from a hose and resulted in the release of 296.34 barrels (bbls) of produced water onto the pipeline right-of-way (ROW) and pasture area. No fluids were recovered. XTO immediately reported the release to the NMOCD via email on April 28, 2022 and submitted a Release Notification Form C-141 on May 9, 2022. The release was assigned Incident Number NAPP2213151424.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. On October 26, 2021, soil boring (C-4567) was advanced to a depth of 101 feet bgs utilizing a hollow stem auger rig. The location of the borehole is approximately 0.48 miles southwest of the release and is depicted on Figure 1. The well log recorded the boring as a dry hole. The Well Record and Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an emergent wetland, located approximately 5,613 feet southwest 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 (medium potential karst designation area).

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

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

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

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On June 6, 2022 Ensolum personnel conducted a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations. Ensolum personnel collected nine soil samples (SS01 through SS09) within the release extent from a depth of 0.5 feet bgs to assess the extent of impacted soil. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody 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

XTO submitted a Right-of-Entry request for land access on the SLO land. Following approval of the request, delineation activities were conducted at the Site to assess the lateral and vertical extent of impacted soil. On August 1, 2022, boreholes BH01 through BH09 were advanced via hand auger and hydrovacuum within the release extent. The boreholes were advanced to a maximum depth of 4 feet bgs. Discrete soil samples were collected from each pothole at depths ranging from 1-foot bgs to 4 feet bgs. Soil from the boreholes was field screened for VOCs and chloride. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix B. The soil samples were handled and analyzed as described above. The soil sample locations are depicted on Figure 2. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix C.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all soil samples collected indicated that Benzene, BTEX, and TPH concentrations were below the Site Closure Criteria. No hydrocarbon impacted soil was identified as a result of the release.

Laboratory analytical results for the delineation soil samples SS01/BH01 through SS06/BH06, and SS09/BH09 indicated that chloride concentrations exceeded the Closure Criteria at depths ranging from 0.5 feet to 1-foot bgs. The terminal depth sample from each borehole, collected at 4 feet bgs, was compliant with the Closure Criteria and reclamation requirement and successfully defined the vertical extent of impacted soil. Laboratory Analytical Reports & Chain-of-Custody Documentation are presented in Appendix D. NMOCD notifications are presented in Appendix E.

PROPOSED REMEDIATION WORK PLAN

The delineation soil sampling results indicate soil containing elevated chloride concentrations exists across an approximate 30,000 square foot area and extends to depths ranging from 0.5 feet to 1-foot bgs. XTO proposes to complete the following remediation activities:

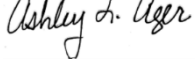
- Excavation of chloride impacted soil to a depth of 1-foot bgs. Excavation will proceed laterally until sidewall samples confirm chloride concentrations are compliant with the Closure Criteria in the top four feet. The proposed excavation extent is depicted on Figure 3.
- Due to the estimated size of the excavation, XTO requests a variance for frequency of excavation confirmation samples. XTO proposes five-point composite samples to be collected at a sampling frequency of 500 square feet along the excavation floor and sidewalls. The proposed sampling frequency would reduce the total amount of samples from approximately 150 samples (200 square feet) to approximately 60 samples. In areas where the excavation is at 1-foot bgs or less, the sidewall will be incorporated into the floor sample aliquots. The soil samples will be handled as described above and analyzed for chloride. The soil samples will be analyzed for chloride only since benzene, BTEX, or TPH concentrations were not identified as a constituent of concern (COC) in the soil samples.
- An estimated 1,500 cubic yards of chloride impacted soil will be excavated. The excavated soil will be transferred a New Mexico approved landfill facility for disposal.
- The excavation will be backfilled and recontoured to match pre-existing conditions and re-seeded with the recommended BLM seed mixture.

XTO will complete the excavation and soil sampling activities within 90 days of the date of approval of this Work Plan by the NMOCD.

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

Sincerely,
Ensolum, LLC

Tacoma Morrissey, MS



Ashley Ager, PG, MS

Senior Geologist

Program Director

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

Appendices:

Figure 1	Site Location Map
Figure 2	Soil Sample Locations
Figure 3	Proposed Excavation Extent
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Lithologic / Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Notifications/Correspondence

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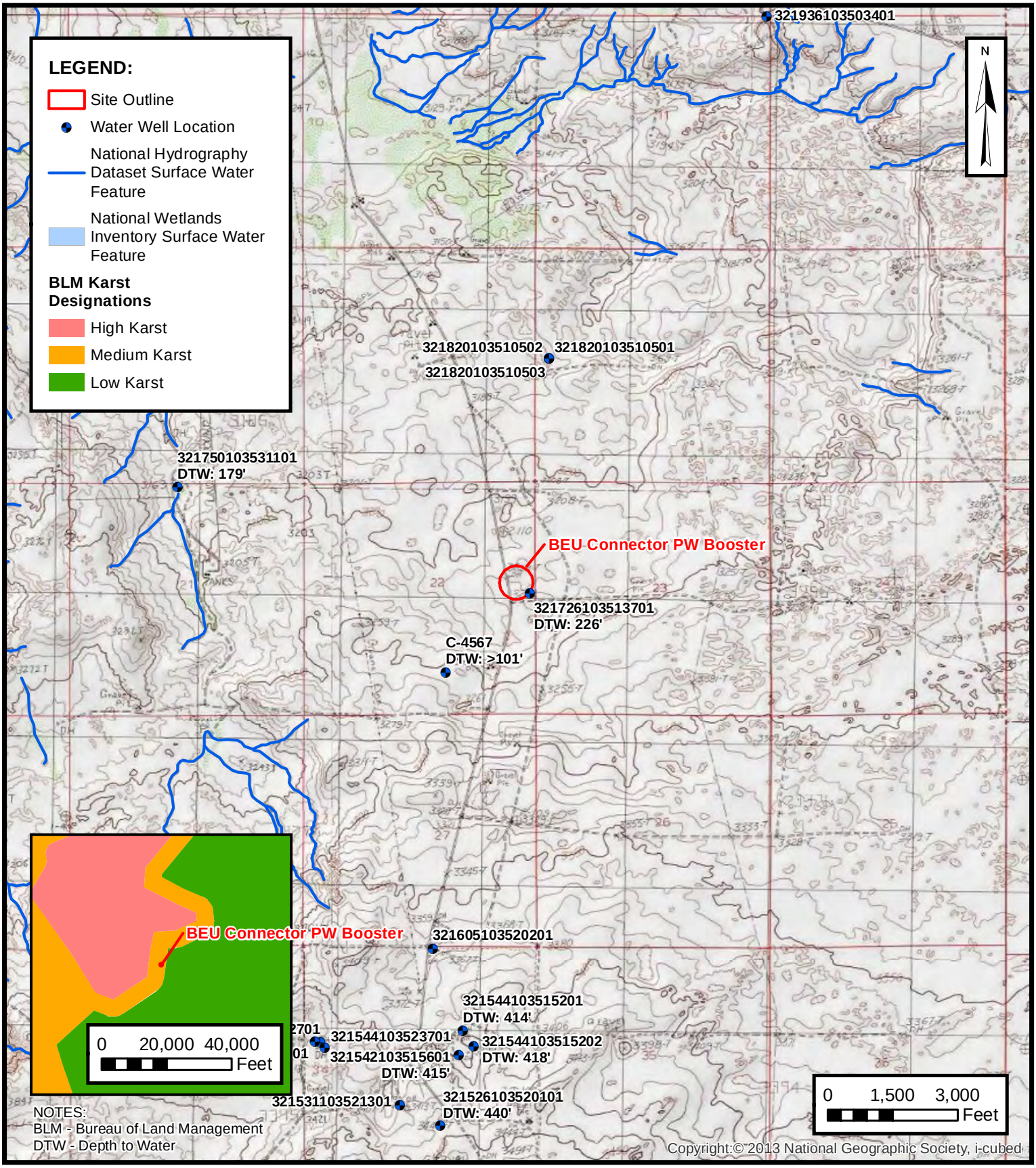
FIGURES



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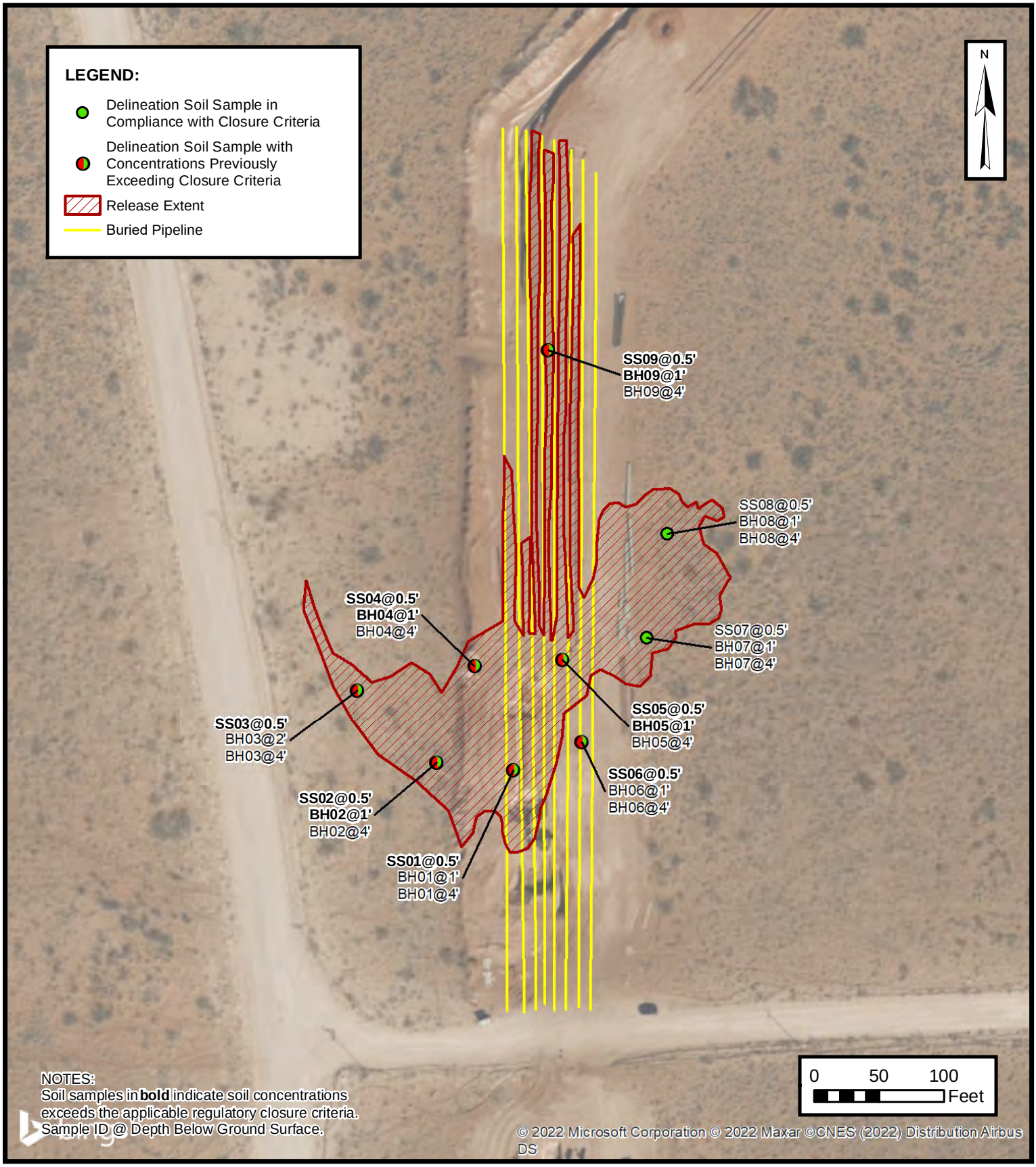
Environmental, Engineering and Hydrogeologic Consultants

SITE RECEPTOR MAP

XTO ENERGY, INC
BEU CONNECTOR PW BOOSTER
NAPP2213151424
Unit H, Sec 22, T23S, R30E
Eddy County, New Mexico

FIGURE
1

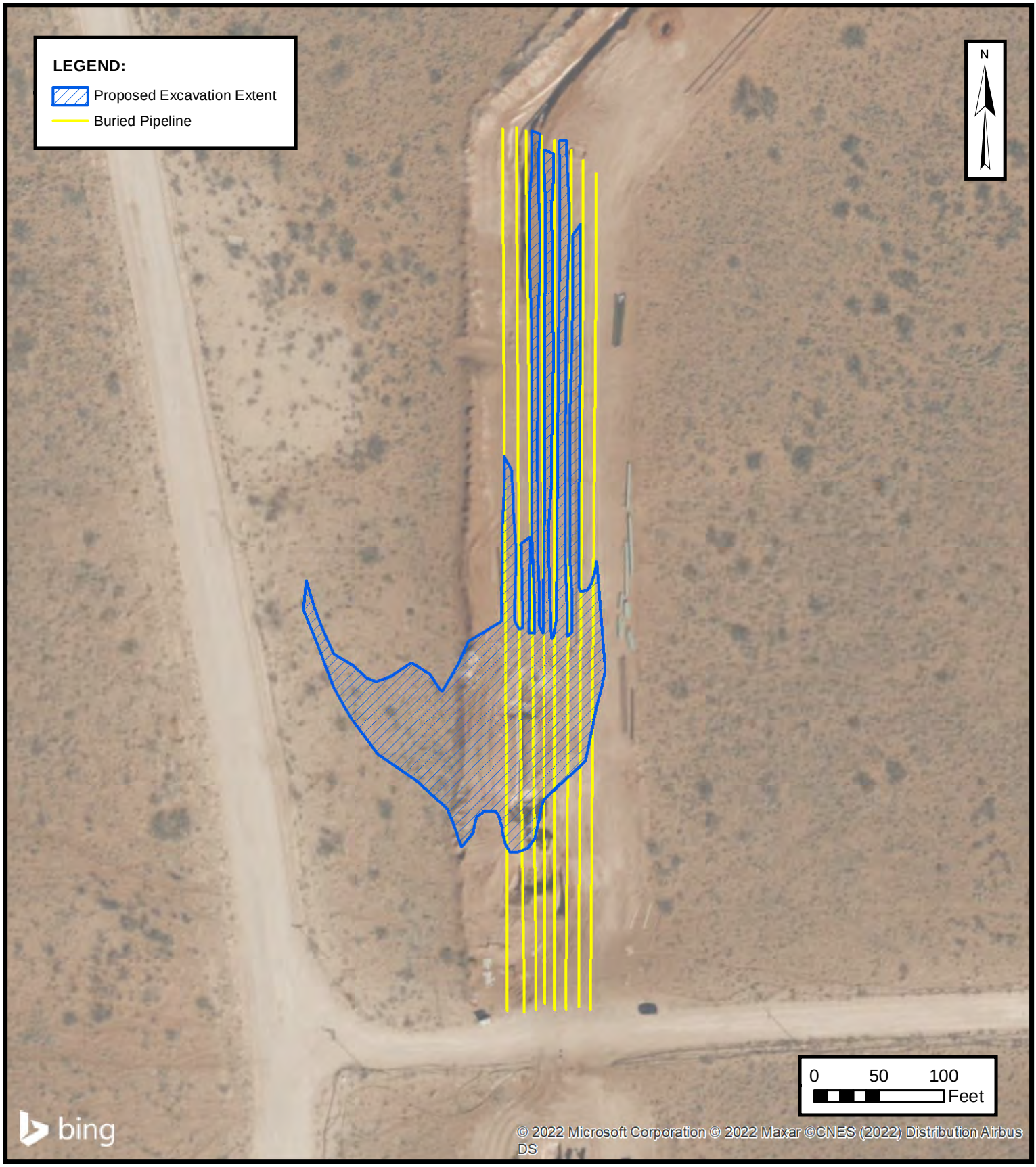


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
BEU CONNECTOR PW BOOSTER
NAPP2213151424
Unit H, Sec 22, T23S, R30E
Eddy County, New Mexico

FIGURE
2



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Environmental, Engineering and Hydrogeologic Consultants

PROPOSED EXCAVATION AREA

XTO ENERGY, INC
BEU CONNECTOR PW BOOSTER
NAPP2213151424
Unit H, Sec 22, T23S, R30E
Eddy County, New Mexico

FIGURE
3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
XTO Energy, Inc.
BEU Connector PW Booster
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
SS01	06/06/2022	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	**5,120**
BH01	08/01/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	107
BH01	08/01/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	41.5
SS02	06/06/2022	0.5	<0.00200	<0.00401	<49.9	54.1	<49.9	54.1	54.1	**4,270**
BH02	08/01/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**1,770**
BH02	08/01/2022	4	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	530
SS03	06/06/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	**6,140**
BH03	08/01/2022	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	518
BH03	08/01/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	17.6
SS04	06/06/2022	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	**7,100**
BH04	08/01/2022	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	**1,570**
BH04	08/01/2022	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	25.6
SS05	06/06/2022	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	**5,020**
BH05	08/01/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	**4,300**
BH05	08/01/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	18.2
SS06	06/06/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	**6,310**
BH06	08/01/2022	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	34.5
BH06	08/01/2022	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	17.9
SS07	06/06/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	17.3
BH07	08/01/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	11.9
BH07	08/01/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	30.7
SS08	06/06/2022	0.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	16.2
BH08	08/01/2022	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	6.59
BH08	08/01/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	10.9

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
XTO Energy, Inc.
BEU Connector PW Booster
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
SS09	06/06/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	**3,970**
BH09	08/01/2022	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	**3,250**
BH09	08/01/2022	4	<0.00200	<0.00399	<49.9	<49.9	<50.0	<49.9	<49.9	90.7

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

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APPENDIX A

Referenced Well Records

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (BH-01)	n/a	C-4567

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Strata Production Company	575-622-1127

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
1301 N. Sycamore Ave	Roswell	NM	88201

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	17	8.70	N
	LONGITUDE	103	52	2.55	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

NW SW SE Sec. 22 T23S R30E, NMPM

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)
10/26/2021	10/26/2021	temporary well material	101	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	101	±8.5	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

OSE DIT NOV 15 2021 PM 1:04

FOR OSE INTERNAL USE

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

FILE NO. C-4567	POD NO.	TRN NO. 704185	
LOCATION 23S.30E.22.431		WELL TAG ID NO. —	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	19	19	Caliche, with fine-grained sand, White/ Tan	Y ✓ N	
19	54	35	Sand, Fine-grained Poorly-graded, Reddish Brown	Y ✓ N	
54	90	36	Clay, with sand, fine-grained poorly-graded,Brown	Y ✓ N	
90	101	11	Caliche, with with sand, fine-grained poorly-graded, Tan	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

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

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.

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

Shane Eldridge, Cameron Pruitt, Camerlo Trevino

RECEIVED NOV 15 2021 PM 1:04

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 — 11/15/2021

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

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

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 2 OF 2

ENSOLUM

APPENDIX B

Lithologic Soil Sampling Logs

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

	Sample Name: BH01	Date: 08/01/22
	Site Name: BEU Connector PW Booster	
	Incident Number: nAPP2213151424	
	Job Number: 03E1558045	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	9,732	0.2	N	SS01	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
D	<168	0.0	N	BH01	1'	1'	SP-S	1'-3', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
D	<168	0.0	N		2'	2'		
D	<168	0.0	N		3'	3'	CCHE	3'-4', CALICHE, dry, tan-off white, poorly consolidated, very silty, no stain, no odor.
D	<168	0.0	N	BH01	4'	4'		
							TD	Total depth at 4' bgs.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

	Sample Name: BH02	Date: 08/01/22
	Site Name: BEU Connector PW Booster	
	Incident Number: nAPP2213151424	
	Job Number: 03E1558045	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	7,672	0.5	N	SS02	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
Dry	2284	0.0	N	BH02	1'	1'	SP-S	1'-4', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
Dry	240.8	0.0	N		2'	2'		
Dry	324.8	0.0	N		3'	3'		
Dry	532	0.0	N	BH02	4'	4'		
							TD	Total depth at 4' bgs.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

	Sample Name: BH03	Date: 08/01/22
	Site Name: BEU Connector PW Booster	
	Incident Number: nAPP2213151424	
	Job Number: 03E1558045	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	9,732	1.9	N	SS03	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
Dry	<168	0.0	N		1'	1'	SP-S	1'-2', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
Dry	532.0	0.0	N	BH03	2'	2'	CCHE	2'-4', CALICHE, dry, tan-off white, poorly consolidated, very silty, no stain, no odor.
Dry	<168	0.0	N		3'	3'		
Dry	<168	0.0	N	BH03	4'	4'		
							TD	Total depth at 4' bgs.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

	Sample Name: BH04	Date: 08/01/22
	Site Name: BEU Connector PW Booster	
	Incident Number: nAPP2213151424	
	Job Number: 03E1558045	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	8,299	1.1	N	SS04	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
Dry	1,864	0.0	N	BH04	1'	1'	SP-S	1'-3', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
Dry	476.0	0.0	N		2'	2'		
Dry	<168	0.1	N		3'	3'	CCHE	3'-4', CALICHE, dry, tan-off white, poorly consolidated, very silty, no stain, no odor.
Dry	<168	0.1	N	BH04	4'	4'	TD	Total depth at 4' bgs.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

	Sample Name: BH05	Date: 08/01/22
	Site Name: BEU Connector PW Booster	
	Incident Number: nAPP2213151424	
	Job Number: 03E1558045	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	5,499	0.0	N	SS05	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
Dry	>3466	0.1	N	BH05	1'	1'	SP-S	1'-4', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
Dry	2111	0.5	N		2'	2'		
Dry	<168	0.5	N		3'	3'		
Dry	<168	0.1	N	BH05	4'	4'		
							TD	Total depth at 4' bgs.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

	Sample Name: BH06	Date: 08/01/22
	Site Name: BEU Connector PW Booster	
	Incident Number: nAPP2213151424	
	Job Number: 03E1558045	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	7,672	0.2	N	SS06	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
Dry	<168	0.0	N	BH06	1'	1'	SP-S	1'-4', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
Dry	<168	0.1	N		2'	2'		
Dry	<168	0.1	N		3'	3'		
Dry	<168	0.2	N	BH06	4'	4'		
							TD	Total depth at 4' bgs.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

	Sample Name: BH07	Date: 08/01/22
	Site Name: BEU Connector PW Booster	
	Incident Number: nAPP2213151424	
	Job Number: 03E1558045	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.2	N	SS07	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
Dry	<168	0.0	N	BH07	1'	1'	SP-S	1'-4', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
Dry	<168	0.5	N		2'	2'		
Dry	<168	0.1	N		3'	3'		
Dry	<168	0.4	N	BH07	4'	4'		
							TD	Total depth at 4' bgs.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Sample Name: BH08	Date: 08/01/22	
Site Name: BEU Connector PW Booster		
Incident Number: nAPP2213151424		
Job Number: 03E1558045		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.0	N	SS08	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
Dry	<168	0.1	N	BH08	1'	1'	SP-S	1'-4', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
Dry	<168	0.0	N		2'	2'		
Dry	<168	0.3	N		3'	3'		
Dry	<168	0.1	N	BH08	4'	4'		
							TD	Total depth at 4' bgs.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

	Sample Name: BH09	Date: 08/01/22
	Site Name: BEU Connector PW Booster	
	Incident Number: nAPP2213151424	
	Job Number: 03E1558045	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Conner Shore	Method: HVAC/Auger
Coordinates: 32.29070, -103.86159	Hole Diameter: N/A	Total Depth: 4'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	4,799	0.1	N	SS09	0.5'		SP-SM	0-1', SILTY SAND, dry, reddish brown, poorly graded, fine grain, no stain, no odor.
Dry	3,225	0.2	N	BH09	1'	1'	SP-S	1'-4', SANDSTONE, dry, reddish brown, poorly graded, fine grain, poorly consolidated, no stain, no odor.
Dry	1,002	0.1	N		2'	2'		
Dry	<168	0.1	N		3'	3'		
Dry	<168	0.1	N	BH09	4'	4'		
							TD	Total depth at 4' bgs.

ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc.
BEU Connector PW Booster
Incident No. NAPP2213151424

Photograph: 1 Date: 8/1/2022
Description: Pothole delineation BH01.
View: South

Photograph: 2 Date: 8/1/2022
Description: Pothole delineation BH05.
View: South

Photograph: 3 Date: 8/1/2022
Description: Pothole delineation BH02.
View: Northeast

Photograph: 4 Date: 8/1/2022
Description: Pothole delineation BH09.
View: South

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2704-1
Laboratory Sample Delivery Group: 03E1558045
Client Project/Site: BEU Connector PW Booster

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

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
8/11/2022 7:08:33 PM

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

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

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

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Job ID: 890-2704-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2704-1

Receipt
The samples were received on 8/2/2022 9:53 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: BH01 (890-2704-2). 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: BH02 (890-2704-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-31731 and analytical batch 880-31678 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-31767 and analytical batch 880-31850 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (CCV 880-31850/20), (CCV 880-31850/33), (LCS 880-31767/1-A) and (890-2704-A-1-I 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: (LCSD 880-31767/2-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) samples: (890-2704-A-1-C MS) and (890-2704-A-1-D MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH02 (890-2704-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH02 (890-2704-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH04 (890-2704-7) and BH04 (890-2704-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH06 (890-2704-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH08 (890-2704-15). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH09 (890-2704-17) and BH09

Case Narrative

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Job ID: 890-2704-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

(890-2704-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-31470 and analytical batch 880-31531 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH01

Lab Sample ID: 890-2704-1
Matrix: Solid
Date Collected: 08/01/22 09:00
Date Received: 08/02/22 09:53
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		08/08/22 13:00	08/10/22 07:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:00	08/10/22 07:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:00	08/10/22 07:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/08/22 13:00	08/10/22 07:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:00	08/10/22 07:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/08/22 13:00	08/10/22 07:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*08/08/22 13:00*	*08/10/22 07:05*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*08/08/22 13:00*	*08/10/22 07:05*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/09/22 15:47	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 11:58	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		08/04/22 09:22	08/05/22 12:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		08/04/22 09:22	08/05/22 12:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*08/04/22 09:22*	*08/05/22 12:07*	*1*
o-Terphenyl	*81*		*70 - 130*	*08/04/22 09:22*	*08/05/22 12:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**107**		4.98		mg/Kg			08/11/22 09:13	1

Client Sample ID: BH01

Lab Sample ID: 890-2704-2
Matrix: Solid
Date Collected: 08/01/22 09:15
Date Received: 08/02/22 09:53
Sample Depth: 4'

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 10:46	08/09/22 10:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 10:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 10:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/22 10:46	08/09/22 10:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 10:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/22 10:46	08/09/22 10:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*08/08/22 10:46*	*08/09/22 10:47*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH01

Date Collected: 08/01/22 09:15
Date Received: 08/02/22 09:53
Sample Depth: 4'

Lab Sample ID: 890-2704-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/08/22 10:46*	*08/09/22 10:47*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			08/09/22 15:47	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 11:58	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		08/04/22 09:22	08/05/22 13:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		08/04/22 09:22	08/05/22 13:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/04/22 09:22	08/05/22 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*08/04/22 09:22*	*08/05/22 13:13*	*1*
o-Terphenyl	*85*		*70 - 130*	*08/04/22 09:22*	*08/05/22 13:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41.5**		4.99	mg/Kg			08/11/22 09:22	1

Client Sample ID: BH02

Date Collected: 08/01/22 09:25
Date Received: 08/02/22 09:53
Sample Depth: 1'

Lab Sample ID: 890-2704-3
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 10:46	08/09/22 11:14	1
Toluene	<0.00199	U	0.00199	mg/Kg		08/08/22 10:46	08/09/22 11:14	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		08/08/22 10:46	08/09/22 11:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		08/08/22 10:46	08/09/22 11:14	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		08/08/22 10:46	08/09/22 11:14	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		08/08/22 10:46	08/09/22 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*08/08/22 10:46*	*08/09/22 11:14*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*08/08/22 10:46*	*08/09/22 11:14*	*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			08/09/22 15:47	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 11:58	1

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH02

Date Collected: 08/01/22 09:25
Date Received: 08/02/22 09:53
Sample Depth: 1'

Lab Sample ID: 890-2704-3
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		08/04/22 09:22	08/05/22 13:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 13:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*65*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 13:34*	*1*
o-Terphenyl	*76*		*70 - 130*	*08/04/22 09:22*	*08/05/22 13:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1770**		25.0		mg/Kg			08/11/22 09:31	5

Client Sample ID: BH02

Date Collected: 08/01/22 09:40
Date Received: 08/02/22 09:53
Sample Depth: 4'

Lab Sample ID: 890-2704-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/08/22 10:46	08/09/22 11:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/08/22 10:46	08/09/22 11:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/08/22 10:46	08/09/22 11:40	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/08/22 10:46	08/09/22 11:40	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/08/22 10:46	08/09/22 11:40	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/08/22 10:46	08/09/22 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*139*	*S1+*	*70 - 130*	*08/08/22 10:46*	*08/09/22 11:40*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*08/08/22 10:46*	*08/09/22 11:40*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/09/22 15:47	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 11:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/04/22 09:22	08/05/22 13:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/22 09:22	08/05/22 13:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/22 09:22	08/05/22 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*61*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 13:56*	*1*
o-Terphenyl	*70*		*70 - 130*	*08/04/22 09:22*	*08/05/22 13:56*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH02

Lab Sample ID: 890-2704-4
Matrix: Solid
Date Collected: 08/01/22 09:40
Date Received: 08/02/22 09:53
Sample Depth: 4'

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	530		4.95		mg/Kg			08/11/22 09:40	1

Client Sample ID: BH03

Lab Sample ID: 890-2704-5
Matrix: Solid
Date Collected: 08/01/22 10:15
Date Received: 08/02/22 09:53
Sample Depth: 2'

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 10:46	08/09/22 12:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 12:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 12:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/22 10:46	08/09/22 12:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 12:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/22 10:46	08/09/22 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*08/08/22 10:46*	*08/09/22 12:06*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*08/08/22 10:46*	*08/09/22 12:06*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/09/22 15:47	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 11:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 14:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 14:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*08/04/22 09:22*	*08/05/22 14:18*	*1*
o-Terphenyl	*101*		*70 - 130*	*08/04/22 09:22*	*08/05/22 14:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	518		4.97		mg/Kg			08/11/22 10:08	1

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH03

Date Collected: 08/01/22 10:25
Date Received: 08/02/22 09:53
Sample Depth: 4'

Lab Sample ID: 890-2704-6
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 10:46	08/09/22 12:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/22 10:46	08/09/22 12:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/22 10:46	08/09/22 12:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/08/22 10:46	08/09/22 12:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/08/22 10:46	08/09/22 12:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/08/22 10:46	08/09/22 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*08/08/22 10:46*	*08/09/22 12:33*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*08/08/22 10:46*	*08/09/22 12:33*	*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			08/09/22 15:47	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 11:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 14:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 14:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*08/04/22 09:22*	*08/05/22 14:40*	*1*
o-Terphenyl	*105*		*70 - 130*	*08/04/22 09:22*	*08/05/22 14:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.6**		5.02		mg/Kg			08/11/22 10:17	1

Client Sample ID: BH04

Date Collected: 08/01/22 10:40
Date Received: 08/02/22 09:53
Sample Depth: 1'

Lab Sample ID: 890-2704-7
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 10:46	08/09/22 12:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/22 10:46	08/09/22 12:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/22 10:46	08/09/22 12:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/08/22 10:46	08/09/22 12:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/08/22 10:46	08/09/22 12:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/08/22 10:46	08/09/22 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*08/08/22 10:46*	*08/09/22 12:59*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH04

Date Collected: 08/01/22 10:40
Date Received: 08/02/22 09:53
Sample Depth: 1'

Lab Sample ID: 890-2704-7
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*08/08/22 10:46*	*08/09/22 12:59*	*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			08/09/22 15:47	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 11:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 15:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 15:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*69*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 15:01*	*1*
o-Terphenyl	*83*		*70 - 130*	*08/04/22 09:22*	*08/05/22 15:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1570**		25.3		mg/Kg			08/11/22 10:27	5

Client Sample ID: BH04

Date Collected: 08/01/22 10:55
Date Received: 08/02/22 09:53
Sample Depth: 4'

Lab Sample ID: 890-2704-8
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 13:11	08/11/22 03:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 03:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 03:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/22 13:11	08/11/22 03:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 03:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/22 13:11	08/11/22 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/08/22 13:11*	*08/11/22 03:28*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*08/08/22 13:11*	*08/11/22 03:28*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/09/22 15:47	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 11:58	1

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH04

Date Collected: 08/01/22 10:55
Date Received: 08/02/22 09:53
Sample Depth: 4'

Lab Sample ID: 890-2704-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/04/22 09:22	08/05/22 15:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/22 09:22	08/05/22 15:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/22 09:22	08/05/22 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*64*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 15:23*	*1*
o-Terphenyl	*75*		*70 - 130*	*08/04/22 09:22*	*08/05/22 15:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25.6**		4.99		mg/Kg			08/11/22 10:36	1

Client Sample ID: BH05

Date Collected: 08/01/22 12:00
Date Received: 08/02/22 09:53
Sample Depth: 1'

Lab Sample ID: 890-2704-9
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 13:11	08/11/22 03:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 03:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 03:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/08/22 13:11	08/11/22 03:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 03:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/08/22 13:11	08/11/22 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*08/08/22 13:11*	*08/11/22 03:07*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/08/22 13:11*	*08/11/22 03:07*	*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			08/09/22 15:47	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 11:58	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		08/04/22 09:22	08/05/22 15:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 15:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*08/04/22 09:22*	*08/05/22 15:45*	*1*
o-Terphenyl	*94*		*70 - 130*	*08/04/22 09:22*	*08/05/22 15:45*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH05

Date Collected: 08/01/22 12:00
Date Received: 08/02/22 09:53
Sample Depth: 1'

Lab Sample ID: 890-2704-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4300		50.1		mg/Kg			08/11/22 10:45	10

Client Sample ID: BH05

Date Collected: 08/01/22 12:15
Date Received: 08/02/22 09:53
Sample Depth: 4'

Lab Sample ID: 890-2704-10
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 13:11	08/11/22 03:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 03:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 03:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/08/22 13:11	08/11/22 03:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 03:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/08/22 13:11	08/11/22 03:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/08/22 13:11*	*08/11/22 03:48*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*08/08/22 13:11*	*08/11/22 03:48*	*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			08/09/22 15:47	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 11:58	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		08/04/22 09:22	08/05/22 16:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 16:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*08/04/22 09:22*	*08/05/22 16:07*	*1*
o-Terphenyl	*87*		*70 - 130*	*08/04/22 09:22*	*08/05/22 16:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.2		5.00		mg/Kg			08/11/22 10:54	1

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH06

Lab Sample ID: 890-2704-11
Matrix: Solid
Date Collected: 08/01/22 12:20
Date Received: 08/02/22 09:53
Sample Depth: 1'

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 13:11	08/11/22 04:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:11	08/11/22 04:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:11	08/11/22 04:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/08/22 13:11	08/11/22 04:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:11	08/11/22 04:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/08/22 13:11	08/11/22 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/08/22 13:11*	*08/11/22 04:09*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*08/08/22 13:11*	*08/11/22 04:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/09/22 15:47	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 11:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 16:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 16:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*65*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 16:50*	*1*
o-Terphenyl	*78*		*70 - 130*	*08/04/22 09:22*	*08/05/22 16:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.5**		4.96		mg/Kg			08/11/22 11:22	1

Client Sample ID: BH06

Lab Sample ID: 890-2704-12
Matrix: Solid
Date Collected: 08/01/22 12:35
Date Received: 08/02/22 09:53
Sample Depth: 4'

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 13:11	08/11/22 04:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 04:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 04:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/08/22 13:11	08/11/22 04:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 04:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/08/22 13:11	08/11/22 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/08/22 13:11*	*08/11/22 04:29*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH06

Lab Sample ID: 890-2704-12
Matrix: Solid
Date Collected: 08/01/22 12:35
Date Received: 08/02/22 09:53
Sample Depth: 4'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*08/08/22 13:11*	*08/11/22 04:29*	*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 15:47	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 11:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		08/04/22 09:22	08/05/22 17:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/04/22 09:22	08/05/22 17:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/04/22 09:22	08/05/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*08/04/22 09:22*	*08/05/22 17:11*	*1*
o-Terphenyl	*89*		*70 - 130*	*08/04/22 09:22*	*08/05/22 17:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.9**		4.95	mg/Kg			08/11/22 11:31	1

Client Sample ID: BH07

Lab Sample ID: 890-2704-13
Matrix: Solid
Date Collected: 08/01/22 12:45
Date Received: 08/02/22 09:53
Sample Depth: 1'

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 13:11	08/11/22 04:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/08/22 13:11	08/11/22 04:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/08/22 13:11	08/11/22 04:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		08/08/22 13:11	08/11/22 04:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/08/22 13:11	08/11/22 04:49	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		08/08/22 13:11	08/11/22 04:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/08/22 13:11*	*08/11/22 04:49*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*08/08/22 13:11*	*08/11/22 04:49*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			08/09/22 15:47	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 11:58	1

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH07

Date Collected: 08/01/22 12:45
Date Received: 08/02/22 09:53
Sample Depth: 1'

Lab Sample ID: 890-2704-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 17:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 17:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*08/04/22 09:22*	*08/05/22 17:33*	*1*
o-Terphenyl	*91*		*70 - 130*	*08/04/22 09:22*	*08/05/22 17:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.9**		4.95		mg/Kg			08/11/22 11:59	1

Client Sample ID: BH07

Date Collected: 08/01/22 13:00
Date Received: 08/02/22 09:53
Sample Depth: 4'

Lab Sample ID: 890-2704-14
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 13:11	08/11/22 05:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 05:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 05:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/08/22 13:11	08/11/22 05:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/22 13:11	08/11/22 05:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/08/22 13:11	08/11/22 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/08/22 13:11*	*08/11/22 05:10*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/08/22 13:11*	*08/11/22 05:10*	*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			08/09/22 15:47	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 11:58	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		08/04/22 09:22	08/05/22 17:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 17:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*08/04/22 09:22*	*08/05/22 17:55*	*1*
o-Terphenyl	*93*		*70 - 130*	*08/04/22 09:22*	*08/05/22 17:55*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH07

Lab Sample ID: 890-2704-14
Matrix: Solid
Date Collected: 08/01/22 13:00
Date Received: 08/02/22 09:53
Sample Depth: 4'

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.7		5.03		mg/Kg			08/11/22 12:08	1

Client Sample ID: BH08

Lab Sample ID: 890-2704-15
Matrix: Solid
Date Collected: 08/01/22 14:00
Date Received: 08/02/22 09:53
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/08/22 13:11	08/11/22 05:30	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/08/22 13:11	08/11/22 05:30	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/08/22 13:11	08/11/22 05:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/08/22 13:11	08/11/22 05:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/08/22 13:11	08/11/22 05:30	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/08/22 13:11	08/11/22 05:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/08/22 13:11*	*08/11/22 05:30*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/08/22 13:11*	*08/11/22 05:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			08/09/22 15:47	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 11:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 18:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 18:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*51*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 18:16*	*1*
o-Terphenyl	*54*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 18:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.59		5.02		mg/Kg			08/11/22 12:17	1

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH08

Lab Sample ID: 890-2704-16
Matrix: Solid
Date Collected: 08/01/22 14:15
Date Received: 08/02/22 09:53
Sample Depth: 4'

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 13:11	08/11/22 05:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:11	08/11/22 05:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:11	08/11/22 05:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/08/22 13:11	08/11/22 05:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/08/22 13:11	08/11/22 05:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/08/22 13:11	08/11/22 05:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/08/22 13:11*	*08/11/22 05:51*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/08/22 13:11*	*08/11/22 05:51*	*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			08/09/22 15:47	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 11:58	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		08/04/22 09:22	08/05/22 18:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 18:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*08/04/22 09:22*	*08/05/22 18:38*	*1*
o-Terphenyl	*86*		*70 - 130*	*08/04/22 09:22*	*08/05/22 18:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.9**		5.01		mg/Kg			08/11/22 12:27	1

Client Sample ID: BH09

Lab Sample ID: 890-2704-17
Matrix: Solid
Date Collected: 08/01/22 13:30
Date Received: 08/02/22 09:53
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/08/22 13:11	08/11/22 06:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/08/22 13:11	08/11/22 06:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/08/22 13:11	08/11/22 06:11	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/08/22 13:11	08/11/22 06:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/08/22 13:11	08/11/22 06:11	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/08/22 13:11	08/11/22 06:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/08/22 13:11*	*08/11/22 06:11*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH09

Lab Sample ID: 890-2704-17
Matrix: Solid
Date Collected: 08/01/22 13:30
Date Received: 08/02/22 09:53
Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*08/08/22 13:11*	*08/11/22 06:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/09/22 15:47	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 11:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 19:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 19:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 19:00*	*1*
o-Terphenyl	*73*		*70 - 130*	*08/04/22 09:22*	*08/05/22 19:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3250**		25.0		mg/Kg			08/11/22 12:36	5

Client Sample ID: BH09

Lab Sample ID: 890-2704-18
Matrix: Solid
Date Collected: 08/01/22 13:40
Date Received: 08/02/22 09:53
Sample Depth: 4'

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 13:11	08/11/22 08:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 08:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 08:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/22 13:11	08/11/22 08:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:11	08/11/22 08:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/22 13:11	08/11/22 08:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/08/22 13:11*	*08/11/22 08:01*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*08/08/22 13:11*	*08/11/22 08:01*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/09/22 15:47	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 11:58	1

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH09

Date Collected: 08/01/22 13:40
Date Received: 08/02/22 09:53
Sample Depth: 4'

Lab Sample ID: 890-2704-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 19:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 19:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/22 09:22	08/05/22 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*68*	*S1-*	*70 - 130*	*08/04/22 09:22*	*08/05/22 19:22*	*1*
o-Terphenyl	*81*		*70 - 130*	*08/04/22 09:22*	*08/05/22 19:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90.7**		4.99		mg/Kg			08/11/22 12:45	1

Surrogate Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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)
820-5243-A-121-D MS	Matrix Spike	109	83
820-5243-A-121-E MSD	Matrix Spike Duplicate	101	89
890-2704-1	BH01	129	79
890-2704-1 MS	BH01	130	85
890-2704-1 MSD	BH01	140 S1+	84
890-2704-2	BH01	131 S1+	93
890-2704-3	BH02	127	86
890-2704-4	BH02	139 S1+	91
890-2704-5	BH03	130	84
890-2704-6	BH03	125	92
890-2704-7	BH04	128	95
890-2704-8	BH04	99	98
890-2704-9	BH05	109	97
890-2704-9 MS	BH05	106	93
890-2704-9 MSD	BH05	102	103
890-2704-10	BH05	98	95
890-2704-11	BH06	99	99
890-2704-12	BH06	103	100
890-2704-13	BH07	101	98
890-2704-14	BH07	101	97
890-2704-15	BH08	100	97
890-2704-16	BH08	106	90
890-2704-17	BH09	103	100
890-2704-18	BH09	104	98
LCS 880-31731/1-A	Lab Control Sample	125	85
LCS 880-31767/1-A	Lab Control Sample	136 S1+	81
LCS 880-31768/1-A	Lab Control Sample	111	92
LCSD 880-31731/2-A	Lab Control Sample Dup	111	83
LCSD 880-31767/2-A	Lab Control Sample Dup	131 S1+	84
LCSD 880-31768/2-A	Lab Control Sample Dup	104	92
MB 880-31523/5-A	Method Blank	92	80
MB 880-31731/5-A	Method Blank	92	80
MB 880-31767/5-A	Method Blank	103	75
MB 880-31768/5-A	Method Blank	94	97
MB 880-31769/5-A	Method Blank	94	102
MB 880-31850/8	Method Blank	99	77

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)
890-2704-1	BH01	72	81
890-2704-1 MS	BH01	60 S1-	63 S1-
890-2704-1 MSD	BH01	66 S1-	67 S1-

Surrogate Summary

Client: Ensolum
Job ID: 890-2704-1
Project/Site: BEU Connector PW Booster
SDG: 03E1558045

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

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-2704-2	BH01	71	85										
890-2704-3	BH02	65 S1-	76										
890-2704-4	BH02	61 S1-	70										
890-2704-5	BH03	86	101										
890-2704-6	BH03	90	105										
890-2704-7	BH04	69 S1-	83										
890-2704-8	BH04	64 S1-	75										
890-2704-9	BH05	77	94										
890-2704-10	BH05	73	87										
890-2704-11	BH06	65 S1-	78										
890-2704-12	BH06	73	89										
890-2704-13	BH07	83	91										
890-2704-14	BH07	83	93										
890-2704-15	BH08	51 S1-	54 S1-										
890-2704-16	BH08	72	86										
890-2704-17	BH09	63 S1-	73										
890-2704-18	BH09	68 S1-	81										
LCS 880-31470/2-A	Lab Control Sample	92	97										
LCSD 880-31470/3-A	Lab Control Sample Dup	88	95										
MB 880-31470/1-A	Method Blank	88	108										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31523/5-A
Matrix: Solid
Analysis Batch: 31678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31523

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/04/22 16:53	08/08/22 11:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/22 16:53	08/08/22 11:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/22 16:53	08/08/22 11:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/22 16:53	08/08/22 11:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/22 16:53	08/08/22 11:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/22 16:53	08/08/22 11:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*08/04/22 16:53*	*08/08/22 11:35*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*08/04/22 16:53*	*08/08/22 11:35*	*1*

Lab Sample ID: MB 880-31731/5-A
Matrix: Solid
Analysis Batch: 31678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31731

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 01:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 01:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 01:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 10:46	08/09/22 01:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 10:46	08/09/22 01:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 10:46	08/09/22 01:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*08/08/22 10:46*	*08/09/22 01:11*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*08/08/22 10:46*	*08/09/22 01:11*	*1*

Lab Sample ID: LCS 880-31731/1-A
Matrix: Solid
Analysis Batch: 31678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31731

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08288		mg/Kg		83	70 - 130		
Toluene			0.100	0.08549		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.08686		mg/Kg		87	70 - 130		
m-Xylene & p-Xylene			0.200	0.1774		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.09732		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: LCSD 880-31731/2-A
Matrix: Solid
Analysis Batch: 31678

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31731

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08517		mg/Kg		85	70 - 130	3	35

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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

Lab Sample ID: LCSD 880-31731/2-A
Matrix: Solid
Analysis Batch: 31678

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31731

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09048		mg/Kg		90	70 - 130	6	35
Ethylbenzene			0.100	0.08974		mg/Kg		90	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1833		mg/Kg		92	70 - 130	3	35
o-Xylene			0.100	0.09907		mg/Kg		99	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*

Lab Sample ID: 820-5243-A-121-D MS
Matrix: Solid
Analysis Batch: 31678

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31731

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1 F2	0.101	0.007984	F1	mg/Kg		8	70 - 130
Toluene	<0.00199	U F1 F2	0.101	0.009017	F1	mg/Kg		9	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.101	0.009234	F1	mg/Kg		9	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.202	0.01864	F1	mg/Kg		9	70 - 130
o-Xylene	<0.00199	U F1 F2	0.101	0.01047	F1	mg/Kg		10	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*

Lab Sample ID: 820-5243-A-121-E MSD
Matrix: Solid
Analysis Batch: 31678

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31731

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.101	0.004525	F1 F2	mg/Kg		4	70 - 130	55	35
Toluene	<0.00199	U F1 F2	0.101	0.003980	F1 F2	mg/Kg		4	70 - 130	78	35
Ethylbenzene	<0.00199	U F1 F2	0.101	0.004221	F1 F2	mg/Kg		4	70 - 130	75	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.201	0.008636	F1 F2	mg/Kg		4	70 - 130	73	35
o-Xylene	<0.00199	U F1 F2	0.101	0.005003	F1 F2	mg/Kg		5	70 - 130	71	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: MB 880-31767/5-A
Matrix: Solid
Analysis Batch: 31850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31767

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:00	08/10/22 06:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:00	08/10/22 06:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:00	08/10/22 06:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/22 13:00	08/10/22 06:38	1

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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

Lab Sample ID: MB 880-31767/5-A
Matrix: Solid
Analysis Batch: 31850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31767

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/22 13:00	08/10/22 06:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/22 13:00	08/10/22 06:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/08/22 13:00*	*08/10/22 06:38*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*08/08/22 13:00*	*08/10/22 06:38*	*1*

Lab Sample ID: LCS 880-31767/1-A
Matrix: Solid
Analysis Batch: 31850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31767

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08434		mg/Kg		84	70 - 130		
Toluene			0.100	0.08825		mg/Kg		88	70 - 130		
Ethylbenzene			0.100	0.08741		mg/Kg		87	70 - 130		
m-Xylene & p-Xylene			0.200	0.1767		mg/Kg		88	70 - 130		
o-Xylene			0.100	0.09757		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*

Lab Sample ID: LCSD 880-31767/2-A
Matrix: Solid
Analysis Batch: 31850

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31767

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08734		mg/Kg		87	70 - 130	3	35
Toluene			0.100	0.08876		mg/Kg		89	70 - 130	1	35
Ethylbenzene			0.100	0.08917		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1831		mg/Kg		92	70 - 130	4	35
o-Xylene			0.100	0.09964		mg/Kg		100	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

Lab Sample ID: 890-2704-1 MS
Matrix: Solid
Analysis Batch: 31850

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 31767

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1	0.100	0.09552		mg/Kg		95	70 - 130		
Toluene	<0.00199	U	0.100	0.09509		mg/Kg		95	70 - 130		
Ethylbenzene	<0.00199	U	0.100	0.09336		mg/Kg		93	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1888		mg/Kg		94	70 - 130		
o-Xylene	<0.00199	U	0.100	0.1014		mg/Kg		101	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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

Lab Sample ID: 890-2704-1 MS
Matrix: Solid
Analysis Batch: 31850

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 31767

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: 890-2704-1 MSD
Matrix: Solid
Analysis Batch: 31850

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 31767

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0998	0.06812	F1	mg/Kg		68	70 - 130	33	35
Toluene	<0.00199	U	0.0998	0.07008		mg/Kg		70	70 - 130	30	35
Ethylbenzene	<0.00199	U	0.0998	0.07097		mg/Kg		71	70 - 130	27	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1453		mg/Kg		73	70 - 130	26	35
o-Xylene	<0.00199	U	0.0998	0.08021		mg/Kg		80	70 - 130	23	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

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*

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
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: 890-2704-9 MS
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: BH05
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		
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: 890-2704-9 MSD
Matrix: Solid
Analysis Batch: 31904

Client Sample ID: BH05
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

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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

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: MB 880-31850/8
Matrix: Solid
Analysis Batch: 31850

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			08/09/22 16:48	1
Toluene	<0.00200	U	0.00200		mg/Kg			08/09/22 16:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			08/09/22 16:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			08/09/22 16:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			08/09/22 16:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			08/09/22 16:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/09/22 16:48*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*		*08/09/22 16:48*	*1*

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

Lab Sample ID: MB 880-31470/1-A
Matrix: Solid
Analysis Batch: 31531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31470

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		08/04/22 09:22	08/05/22 11:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 11:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/22 09:22	08/05/22 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*08/04/22 09:22*	*08/05/22 11:01*	*1*
o-Terphenyl	*108*		*70 - 130*	*08/04/22 09:22*	*08/05/22 11:01*	*1*

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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

Lab Sample ID: LCS 880-31470/2-A
Matrix: Solid
Analysis Batch: 31531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31470

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1009		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	981.4		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: LCSD 880-31470/3-A
Matrix: Solid
Analysis Batch: 31531

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31470

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	969.8		mg/Kg		97	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	894.9		mg/Kg		89	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: 890-2704-1 MS
Matrix: Solid
Analysis Batch: 31531

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 31470

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	766.4		mg/Kg		75	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	620.6	F1	mg/Kg		62	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*60*	*S1-*	*70 - 130*
o-Terphenyl	*63*	*S1-*	*70 - 130*

Lab Sample ID: 890-2704-1 MSD
Matrix: Solid
Analysis Batch: 31531

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 31470

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	861.7		mg/Kg		84	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	671.9	F1	mg/Kg		67	70 - 130	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*66*	*S1-*	*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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

Lab Sample ID: 890-2704-1 MSD
Matrix: Solid
Analysis Batch: 31531

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 31470

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	67	S1-	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31446/1-A
Matrix: Solid
Analysis Batch: 31668

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 08:18	1

Lab Sample ID: LCS 880-31446/2-A
Matrix: Solid
Analysis Batch: 31668

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	244.6		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-31446/3-A
Matrix: Solid
Analysis Batch: 31668

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	249.4		mg/Kg		100	90 - 110	2	20

Lab Sample ID: 880-17639-A-1-B MS
Matrix: Solid
Analysis Batch: 31668

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	1050		2490	3537		mg/Kg		100	90 - 110		

Lab Sample ID: 880-17639-A-1-C MSD
Matrix: Solid
Analysis Batch: 31668

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	1050		2490	3565		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 890-2704-10 MS
Matrix: Solid
Analysis Batch: 31668

Client Sample ID: BH05
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	18.2		250	277.6		mg/Kg		104	90 - 110		

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2704-10 MSD
Matrix: Solid
Analysis Batch: 31668

Client Sample ID: BH05
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	18.2		250	274.0		mg/Kg		102	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

GC VOA

Prep Batch: 31523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31523/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 31678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-2	BH01	Total/NA	Solid	8021B	31731
890-2704-3	BH02	Total/NA	Solid	8021B	31731
890-2704-4	BH02	Total/NA	Solid	8021B	31731
890-2704-5	BH03	Total/NA	Solid	8021B	31731
890-2704-6	BH03	Total/NA	Solid	8021B	31731
890-2704-7	BH04	Total/NA	Solid	8021B	31731
MB 880-31523/5-A	Method Blank	Total/NA	Solid	8021B	31523
MB 880-31731/5-A	Method Blank	Total/NA	Solid	8021B	31731
LCS 880-31731/1-A	Lab Control Sample	Total/NA	Solid	8021B	31731
LCSD 880-31731/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31731
820-5243-A-121-D MS	Matrix Spike	Total/NA	Solid	8021B	31731
820-5243-A-121-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	31731

Prep Batch: 31731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-2	BH01	Total/NA	Solid	5035	
890-2704-3	BH02	Total/NA	Solid	5035	
890-2704-4	BH02	Total/NA	Solid	5035	
890-2704-5	BH03	Total/NA	Solid	5035	
890-2704-6	BH03	Total/NA	Solid	5035	
890-2704-7	BH04	Total/NA	Solid	5035	
MB 880-31731/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31731/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31731/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-5243-A-121-D MS	Matrix Spike	Total/NA	Solid	5035	
820-5243-A-121-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 31767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-1	BH01	Total/NA	Solid	5035	
MB 880-31767/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31767/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31767/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2704-1 MS	BH01	Total/NA	Solid	5035	
890-2704-1 MSD	BH01	Total/NA	Solid	5035	

Prep Batch: 31768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-8	BH04	Total/NA	Solid	5035	
890-2704-9	BH05	Total/NA	Solid	5035	
890-2704-10	BH05	Total/NA	Solid	5035	
890-2704-11	BH06	Total/NA	Solid	5035	
890-2704-12	BH06	Total/NA	Solid	5035	
890-2704-13	BH07	Total/NA	Solid	5035	
890-2704-14	BH07	Total/NA	Solid	5035	
890-2704-15	BH08	Total/NA	Solid	5035	
890-2704-16	BH08	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

GC VOA (Continued)

Prep Batch: 31768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-17	BH09	Total/NA	Solid	5035	
890-2704-18	BH09	Total/NA	Solid	5035	
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	
890-2704-9 MS	BH05	Total/NA	Solid	5035	
890-2704-9 MSD	BH05	Total/NA	Solid	5035	

Prep Batch: 31769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31769/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 31850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-1	BH01	Total/NA	Solid	8021B	31767
MB 880-31767/5-A	Method Blank	Total/NA	Solid	8021B	31767
MB 880-31850/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-31767/1-A	Lab Control Sample	Total/NA	Solid	8021B	31767
LCSD 880-31767/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31767
890-2704-1 MS	BH01	Total/NA	Solid	8021B	31767
890-2704-1 MSD	BH01	Total/NA	Solid	8021B	31767

Analysis Batch: 31860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-1	BH01	Total/NA	Solid	Total BTEX	
890-2704-2	BH01	Total/NA	Solid	Total BTEX	
890-2704-3	BH02	Total/NA	Solid	Total BTEX	
890-2704-4	BH02	Total/NA	Solid	Total BTEX	
890-2704-5	BH03	Total/NA	Solid	Total BTEX	
890-2704-6	BH03	Total/NA	Solid	Total BTEX	
890-2704-7	BH04	Total/NA	Solid	Total BTEX	
890-2704-8	BH04	Total/NA	Solid	Total BTEX	
890-2704-9	BH05	Total/NA	Solid	Total BTEX	
890-2704-10	BH05	Total/NA	Solid	Total BTEX	
890-2704-11	BH06	Total/NA	Solid	Total BTEX	
890-2704-12	BH06	Total/NA	Solid	Total BTEX	
890-2704-13	BH07	Total/NA	Solid	Total BTEX	
890-2704-14	BH07	Total/NA	Solid	Total BTEX	
890-2704-15	BH08	Total/NA	Solid	Total BTEX	
890-2704-16	BH08	Total/NA	Solid	Total BTEX	
890-2704-17	BH09	Total/NA	Solid	Total BTEX	
890-2704-18	BH09	Total/NA	Solid	Total BTEX	

Analysis Batch: 31904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-8	BH04	Total/NA	Solid	8021B	31768
890-2704-9	BH05	Total/NA	Solid	8021B	31768
890-2704-10	BH05	Total/NA	Solid	8021B	31768
890-2704-11	BH06	Total/NA	Solid	8021B	31768
890-2704-12	BH06	Total/NA	Solid	8021B	31768
890-2704-13	BH07	Total/NA	Solid	8021B	31768

QC Association Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

GC VOA (Continued)

Analysis Batch: 31904 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-14	BH07	Total/NA	Solid	8021B	31768
890-2704-15	BH08	Total/NA	Solid	8021B	31768
890-2704-16	BH08	Total/NA	Solid	8021B	31768
890-2704-17	BH09	Total/NA	Solid	8021B	31768
890-2704-18	BH09	Total/NA	Solid	8021B	31768
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
LCSD 880-31768/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31768
890-2704-9 MS	BH05	Total/NA	Solid	8021B	31768
890-2704-9 MSD	BH05	Total/NA	Solid	8021B	31768

GC Semi VOA

Prep Batch: 31470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-1	BH01	Total/NA	Solid	8015NM Prep	
890-2704-2	BH01	Total/NA	Solid	8015NM Prep	
890-2704-3	BH02	Total/NA	Solid	8015NM Prep	
890-2704-4	BH02	Total/NA	Solid	8015NM Prep	
890-2704-5	BH03	Total/NA	Solid	8015NM Prep	
890-2704-6	BH03	Total/NA	Solid	8015NM Prep	
890-2704-7	BH04	Total/NA	Solid	8015NM Prep	
890-2704-8	BH04	Total/NA	Solid	8015NM Prep	
890-2704-9	BH05	Total/NA	Solid	8015NM Prep	
890-2704-10	BH05	Total/NA	Solid	8015NM Prep	
890-2704-11	BH06	Total/NA	Solid	8015NM Prep	
890-2704-12	BH06	Total/NA	Solid	8015NM Prep	
890-2704-13	BH07	Total/NA	Solid	8015NM Prep	
890-2704-14	BH07	Total/NA	Solid	8015NM Prep	
890-2704-15	BH08	Total/NA	Solid	8015NM Prep	
890-2704-16	BH08	Total/NA	Solid	8015NM Prep	
890-2704-17	BH09	Total/NA	Solid	8015NM Prep	
890-2704-18	BH09	Total/NA	Solid	8015NM Prep	
MB 880-31470/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31470/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31470/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2704-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-2704-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-1	BH01	Total/NA	Solid	8015B NM	31470
890-2704-2	BH01	Total/NA	Solid	8015B NM	31470
890-2704-3	BH02	Total/NA	Solid	8015B NM	31470
890-2704-4	BH02	Total/NA	Solid	8015B NM	31470
890-2704-5	BH03	Total/NA	Solid	8015B NM	31470
890-2704-6	BH03	Total/NA	Solid	8015B NM	31470
890-2704-7	BH04	Total/NA	Solid	8015B NM	31470
890-2704-8	BH04	Total/NA	Solid	8015B NM	31470
890-2704-9	BH05	Total/NA	Solid	8015B NM	31470

QC Association Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

GC Semi VOA (Continued)

Analysis Batch: 31531 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-10	BH05	Total/NA	Solid	8015B NM	31470
890-2704-11	BH06	Total/NA	Solid	8015B NM	31470
890-2704-12	BH06	Total/NA	Solid	8015B NM	31470
890-2704-13	BH07	Total/NA	Solid	8015B NM	31470
890-2704-14	BH07	Total/NA	Solid	8015B NM	31470
890-2704-15	BH08	Total/NA	Solid	8015B NM	31470
890-2704-16	BH08	Total/NA	Solid	8015B NM	31470
890-2704-17	BH09	Total/NA	Solid	8015B NM	31470
890-2704-18	BH09	Total/NA	Solid	8015B NM	31470
MB 880-31470/1-A	Method Blank	Total/NA	Solid	8015B NM	31470
LCS 880-31470/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31470
LCSD 880-31470/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31470
890-2704-1 MS	BH01	Total/NA	Solid	8015B NM	31470
890-2704-1 MSD	BH01	Total/NA	Solid	8015B NM	31470

Analysis Batch: 31749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-1	BH01	Total/NA	Solid	8015 NM	
890-2704-2	BH01	Total/NA	Solid	8015 NM	
890-2704-3	BH02	Total/NA	Solid	8015 NM	
890-2704-4	BH02	Total/NA	Solid	8015 NM	
890-2704-5	BH03	Total/NA	Solid	8015 NM	
890-2704-6	BH03	Total/NA	Solid	8015 NM	
890-2704-7	BH04	Total/NA	Solid	8015 NM	
890-2704-8	BH04	Total/NA	Solid	8015 NM	
890-2704-9	BH05	Total/NA	Solid	8015 NM	
890-2704-10	BH05	Total/NA	Solid	8015 NM	
890-2704-11	BH06	Total/NA	Solid	8015 NM	
890-2704-12	BH06	Total/NA	Solid	8015 NM	
890-2704-13	BH07	Total/NA	Solid	8015 NM	
890-2704-14	BH07	Total/NA	Solid	8015 NM	
890-2704-15	BH08	Total/NA	Solid	8015 NM	
890-2704-16	BH08	Total/NA	Solid	8015 NM	
890-2704-17	BH09	Total/NA	Solid	8015 NM	
890-2704-18	BH09	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 31446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-1	BH01	Soluble	Solid	DI Leach	
890-2704-2	BH01	Soluble	Solid	DI Leach	
890-2704-3	BH02	Soluble	Solid	DI Leach	
890-2704-4	BH02	Soluble	Solid	DI Leach	
890-2704-5	BH03	Soluble	Solid	DI Leach	
890-2704-6	BH03	Soluble	Solid	DI Leach	
890-2704-7	BH04	Soluble	Solid	DI Leach	
890-2704-8	BH04	Soluble	Solid	DI Leach	
890-2704-9	BH05	Soluble	Solid	DI Leach	
890-2704-10	BH05	Soluble	Solid	DI Leach	
890-2704-11	BH06	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

HPLC/IC (Continued)

Leach Batch: 31446 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-12	BH06	Soluble	Solid	DI Leach	
890-2704-13	BH07	Soluble	Solid	DI Leach	
890-2704-14	BH07	Soluble	Solid	DI Leach	
890-2704-15	BH08	Soluble	Solid	DI Leach	
890-2704-16	BH08	Soluble	Solid	DI Leach	
890-2704-17	BH09	Soluble	Solid	DI Leach	
890-2704-18	BH09	Soluble	Solid	DI Leach	
MB 880-31446/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31446/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31446/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-17639-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-17639-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-2704-10 MS	BH05	Soluble	Solid	DI Leach	
890-2704-10 MSD	BH05	Soluble	Solid	DI Leach	

Analysis Batch: 31668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2704-1	BH01	Soluble	Solid	300.0	31446
890-2704-2	BH01	Soluble	Solid	300.0	31446
890-2704-3	BH02	Soluble	Solid	300.0	31446
890-2704-4	BH02	Soluble	Solid	300.0	31446
890-2704-5	BH03	Soluble	Solid	300.0	31446
890-2704-6	BH03	Soluble	Solid	300.0	31446
890-2704-7	BH04	Soluble	Solid	300.0	31446
890-2704-8	BH04	Soluble	Solid	300.0	31446
890-2704-9	BH05	Soluble	Solid	300.0	31446
890-2704-10	BH05	Soluble	Solid	300.0	31446
890-2704-11	BH06	Soluble	Solid	300.0	31446
890-2704-12	BH06	Soluble	Solid	300.0	31446
890-2704-13	BH07	Soluble	Solid	300.0	31446
890-2704-14	BH07	Soluble	Solid	300.0	31446
890-2704-15	BH08	Soluble	Solid	300.0	31446
890-2704-16	BH08	Soluble	Solid	300.0	31446
890-2704-17	BH09	Soluble	Solid	300.0	31446
890-2704-18	BH09	Soluble	Solid	300.0	31446
MB 880-31446/1-A	Method Blank	Soluble	Solid	300.0	31446
LCS 880-31446/2-A	Lab Control Sample	Soluble	Solid	300.0	31446
LCSD 880-31446/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31446
880-17639-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	31446
880-17639-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	31446
890-2704-10 MS	BH05	Soluble	Solid	300.0	31446
890-2704-10 MSD	BH05	Soluble	Solid	300.0	31446

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH01
Date Collected: 08/01/22 09:00
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-1
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	31767	08/08/22 13:00	MR	EET MID
Total/NA	Analysis	8021B		1			31850	08/10/22 07:05	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 12:07	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	31446	08/03/22 17:09	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 09:13	CH	EET MID

Client Sample ID: BH01
Date Collected: 08/01/22 09:15
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31731	08/08/22 10:46	EL	EET MID
Total/NA	Analysis	8021B		1			31678	08/09/22 10:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 13:13	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31446	08/03/22 17:09	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 09:22	CH	EET MID

Client Sample ID: BH02
Date Collected: 08/01/22 09:25
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	31731	08/08/22 10:46	EL	EET MID
Total/NA	Analysis	8021B		1			31678	08/09/22 11:14	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 13:34	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31446	08/03/22 17:09	SMC	EET MID
Soluble	Analysis	300.0		5			31668	08/11/22 09:31	CH	EET MID

Client Sample ID: BH02
Date Collected: 08/01/22 09:40
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	31731	08/08/22 10:46	EL	EET MID
Total/NA	Analysis	8021B		1			31678	08/09/22 11:40	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH02
Date Collected: 08/01/22 09:40
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 13:56	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	31446	08/03/22 17:09	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 09:40	CH	EET MID

Client Sample ID: BH03
Date Collected: 08/01/22 10:15
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31731	08/08/22 10:46	EL	EET MID
Total/NA	Analysis	8021B		1			31678	08/09/22 12:06	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 14:18	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	31446	08/03/22 17:09	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 10:08	CH	EET MID

Client Sample ID: BH03
Date Collected: 08/01/22 10:25
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31731	08/08/22 10:46	EL	EET MID
Total/NA	Analysis	8021B		1			31678	08/09/22 12:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 14:40	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	31446	08/03/22 17:09	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 10:17	CH	EET MID

Client Sample ID: BH04
Date Collected: 08/01/22 10:40
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	31731	08/08/22 10:46	EL	EET MID
Total/NA	Analysis	8021B		1			31678	08/09/22 12:59	MR	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 15:01	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH04
Date Collected: 08/01/22 10:40
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	31446	08/03/22 17:09	SMC	EET MID
Soluble	Analysis	300.0		5			31668	08/11/22 10:27	CH	EET MID

Client Sample ID: BH04
Date Collected: 08/01/22 10:55
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 03:28	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 15:23	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31446	08/03/22 17:09	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 10:36	CH	EET MID

Client Sample ID: BH05
Date Collected: 08/01/22 12:00
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 03:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 15:45	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		10			31668	08/11/22 10:45	CH	EET MID

Client Sample ID: BH05
Date Collected: 08/01/22 12:15
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 03:48	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 16:07	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 10:54	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH06
Date Collected: 08/01/22 12:20
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 04:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 16:50	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 11:22	CH	EET MID

Client Sample ID: BH06
Date Collected: 08/01/22 12:35
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 04:29	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 17:11	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 11:31	CH	EET MID

Client Sample ID: BH07
Date Collected: 08/01/22 12:45
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 04:49	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 17:33	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 11:59	CH	EET MID

Client Sample ID: BH07
Date Collected: 08/01/22 13:00
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 05:10	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH07
Date Collected: 08/01/22 13:00
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 17:55	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 12:08	CH	EET MID

Client Sample ID: BH08
Date Collected: 08/01/22 14:00
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 05:30	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 18:16	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 12:17	CH	EET MID

Client Sample ID: BH08
Date Collected: 08/01/22 14:15
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 05:51	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 18:38	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 12:27	CH	EET MID

Client Sample ID: BH09
Date Collected: 08/01/22 13:30
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 06:11	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 19:00	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Client Sample ID: BH09
Date Collected: 08/01/22 13:30
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		5			31668	08/11/22 12:36	CH	EET MID

Client Sample ID: BH09
Date Collected: 08/01/22 13:40
Date Received: 08/02/22 09:53

Lab Sample ID: 890-2704-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31768	08/08/22 13:11	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31904	08/11/22 08:01	SM	EET MID
Total/NA	Analysis	Total BTEX		1			31860	08/09/22 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			31749	08/08/22 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31470	08/04/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			31531	08/05/22 19:22	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31446	08/03/22 17:10	SMC	EET MID
Soluble	Analysis	300.0		1			31668	08/11/22 12:45	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: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

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: BEU Connector PW Booster

Job ID: 890-2704-1
SDG: 03E1558045

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2704-1	BH01	Solid	08/01/22 09:00	08/02/22 09:53	1'
890-2704-2	BH01	Solid	08/01/22 09:15	08/02/22 09:53	4'
890-2704-3	BH02	Solid	08/01/22 09:25	08/02/22 09:53	1'
890-2704-4	BH02	Solid	08/01/22 09:40	08/02/22 09:53	4'
890-2704-5	BH03	Solid	08/01/22 10:15	08/02/22 09:53	2'
890-2704-6	BH03	Solid	08/01/22 10:25	08/02/22 09:53	4'
890-2704-7	BH04	Solid	08/01/22 10:40	08/02/22 09:53	1'
890-2704-8	BH04	Solid	08/01/22 10:55	08/02/22 09:53	4'
890-2704-9	BH05	Solid	08/01/22 12:00	08/02/22 09:53	1'
890-2704-10	BH05	Solid	08/01/22 12:15	08/02/22 09:53	4'
890-2704-11	BH06	Solid	08/01/22 12:20	08/02/22 09:53	1'
890-2704-12	BH06	Solid	08/01/22 12:35	08/02/22 09:53	4'
890-2704-13	BH07	Solid	08/01/22 12:45	08/02/22 09:53	1'
890-2704-14	BH07	Solid	08/01/22 13:00	08/02/22 09:53	4'
890-2704-15	BH08	Solid	08/01/22 14:00	08/02/22 09:53	1'
890-2704-16	BH08	Solid	08/01/22 14:15	08/02/22 09:53	4'
890-2704-17	BH09	Solid	08/01/22 13:30	08/02/22 09:53	1'
890-2704-18	BH09	Solid	08/01/22 13:40	08/02/22 09:53	4'

Chain of Custody

eurofins | Environment Testing Xenco

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

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Garrett Green
Company Name:	Ensolum	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 East Green St.
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:	BEU Connector PW Booster	**Turn Around**	
Project Number:	03E1558045	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TVM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	6.0	
Total Containers:		Corrected Temperature:	5.8	

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
BH01	s	08.01.22	900	1'	G	1		x	x	x	nAPP2213151424
BH01	s	08.01.22	915	4'	G	1		x	x	x	
BH02	s	08.01.22	925	1'	G	1		x	x	x	Cost Center: 1081711001
BH02	s	08.01.22	940	4'	G	1		x	x	x	
BH03	s	08.01.22	1015	2'	G	1		x	x	x	AFE:
BH03	s	08.01.22	1025	4'	G	1		x	x	x	
BH04	s	08.01.22	1040	1'	G	1		x	x	x	API: 30-015-40660
BH04	s	08.01.22	1055	4'	G	1		x	x	x	
BH05	s	08.01.22	1200	1'	G	1		x	x	x	
BH05	s	08.01.22	1215	4'	G	1		x	x	x	

890-2704 Chain of Custody

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

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		8.2.22 953	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Chain of Custody

eurofins | Environment Testing Xenco

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

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Garrett Green
Company Name:	Ensolum	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 East Green St.
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:	BEU Connector PW Booster	Turn Around	
Project Number:	03E1558045	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

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

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
BH06	s	08.01.22	1220	1'	G	1		x	x	x	nAPP2213151424
BH06	s	08.01.22	1235	4'	G	1		x	x	x	
BH07	s	08.01.22	1245	1'	G	1		x	x	x	Cost Center: 1081711001
BH07	s	08.01.22	1300	4'	G	1		x	x	x	
BH08	s	08.01.22	1400	1'	G	1		x	x	x	AFE:
BH08	s	08.01.22	1415	4'	G	1		x	x	x	
BH09	s	08.01.22	1330	1'	G	1		x	x	x	API: 30-015-40660
BH09	s	08.01.22	1340	4'	G	1		x	x	x	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		8-2-22 953	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2704-1
SDG Number: 03E1558045

Login Number: 2704
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: 890-2704-1
SDG Number: 03E1558045

Login Number: 2704
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/03/22 10:15 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: 890-2380-1
Laboratory Sample Delivery Group: 03E1558045
Client Project/Site: BEU Connector PW Booster
Revision: 1

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

Attn: Ben Belill

JKramer

Authorized for release by:
10/10/2022 3:17:14 PM

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

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Job ID: 890-2380-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2380-1

REVISION

The report being provided is a revision of the original report sent on 6/10/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID changes.

Report revision history

Receipt
The samples were received on 6/6/2022 12:24 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 29.4°C

GC VOA
Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-27017 and analytical batch 880-26971 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.

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: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS06

Date Collected: 06/06/22 08:25
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/07/22 14:58	06/08/22 01:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/07/22 14:58	06/08/22 01:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/07/22 14:58	06/08/22 01:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/07/22 14:58	06/08/22 01:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/07/22 14:58	06/08/22 01:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/07/22 14:58	06/08/22 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*06/07/22 14:58*	*06/08/22 01:32*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*06/07/22 14:58*	*06/08/22 01:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/10/22 09:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 11:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 11:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*06/08/22 17:15*	*06/09/22 11:31*	*1*
o-Terphenyl	*111*		*70 - 130*	*06/08/22 17:15*	*06/09/22 11:31*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6310**		49.8		mg/Kg			06/09/22 22:16	10

Client Sample ID: SS07

Date Collected: 06/06/22 08:30
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/07/22 14:58	06/08/22 01:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/07/22 14:58	06/08/22 01:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/07/22 14:58	06/08/22 01:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/07/22 14:58	06/08/22 01:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/07/22 14:58	06/08/22 01:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/07/22 14:58	06/08/22 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*06/07/22 14:58*	*06/08/22 01:52*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS07

Date Collected: 06/06/22 08:30
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/07/22 14:58*	*06/08/22 01:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			06/10/22 09:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/08/22 17:15	06/09/22 12:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/08/22 17:15	06/09/22 12:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/08/22 17:15	06/09/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*06/08/22 17:15*	*06/09/22 12:34*	*1*
o-Terphenyl	*85*		*70 - 130*	*06/08/22 17:15*	*06/09/22 12:34*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.3**		4.96	mg/Kg			06/09/22 22:25	1

Client Sample ID: SS08

Date Collected: 06/06/22 08:35
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		06/07/22 14:58	06/08/22 02:12	1
Toluene	<0.00198	U	0.00198	mg/Kg		06/07/22 14:58	06/08/22 02:12	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/07/22 14:58	06/08/22 02:12	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		06/07/22 14:58	06/08/22 02:12	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/07/22 14:58	06/08/22 02:12	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		06/07/22 14:58	06/08/22 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*06/07/22 14:58*	*06/08/22 02:12*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/07/22 14:58*	*06/08/22 02:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			06/10/22 09:57	1

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS08

Date Collected: 06/06/22 08:35
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 12:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 12:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*06/08/22 17:15*	*06/09/22 12:55*	*1*
o-Terphenyl	*101*		*70 - 130*	*06/08/22 17:15*	*06/09/22 12:55*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16.2**		4.99		mg/Kg			06/09/22 22:53	1

Client Sample ID: SS09

Date Collected: 06/06/22 08:40
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 02:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 02:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 02:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/07/22 14:58	06/08/22 02:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 02:33	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/07/22 14:58	06/08/22 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*06/07/22 14:58*	*06/08/22 02:33*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/07/22 14:58*	*06/08/22 02:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/10/22 09:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/08/22 17:15*	*06/09/22 13:16*	*1*
o-Terphenyl	*102*		*70 - 130*	*06/08/22 17:15*	*06/09/22 13:16*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS09
Date Collected: 06/06/22 08:40
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-4
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3970**		24.9		mg/Kg			06/09/22 23:02	5

Client Sample ID: SS04
Date Collected: 06/06/22 08:45
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 02:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 02:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 02:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/07/22 14:58	06/08/22 02:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 02:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/07/22 14:58	06/08/22 02:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*06/07/22 14:58*	*06/08/22 02:53*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/07/22 14:58*	*06/08/22 02:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/10/22 09:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/08/22 17:15*	*06/09/22 13:38*	*1*
o-Terphenyl	*103*		*70 - 130*	*06/08/22 17:15*	*06/09/22 13:38*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7100**		50.2		mg/Kg			06/09/22 23:11	10

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS03

Date Collected: 06/06/22 08:50
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/07/22 14:58	06/08/22 03:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/07/22 14:58	06/08/22 03:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/07/22 14:58	06/08/22 03:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/07/22 14:58	06/08/22 03:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/07/22 14:58	06/08/22 03:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/07/22 14:58	06/08/22 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*06/07/22 14:58*	*06/08/22 03:14*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/07/22 14:58*	*06/08/22 03:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/10/22 09:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*06/08/22 17:15*	*06/09/22 13:59*	*1*
o-Terphenyl	*110*		*70 - 130*	*06/08/22 17:15*	*06/09/22 13:59*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6140**		50.1		mg/Kg			06/09/22 23:20	10

Client Sample ID: SS02

Date Collected: 06/06/22 08:55
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 03:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 03:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 03:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/07/22 14:58	06/08/22 03:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 03:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/07/22 14:58	06/08/22 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*06/07/22 14:58*	*06/08/22 03:34*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS02

Date Collected: 06/06/22 08:55
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*06/07/22 14:58*	*06/08/22 03:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**54.1**		49.9	mg/Kg			06/10/22 09:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		06/08/22 17:15	06/09/22 14:21	1
Diesel Range Organics (Over C10-C28)	**54.1**		49.9	mg/Kg		06/08/22 17:15	06/09/22 14:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/08/22 17:15	06/09/22 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/08/22 17:15*	*06/09/22 14:21*	*1*
o-Terphenyl	*105*		*70 - 130*	*06/08/22 17:15*	*06/09/22 14:21*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4270**		49.9	mg/Kg			06/09/22 23:29	10

Client Sample ID: SS01

Date Collected: 06/06/22 09:00
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		06/07/22 14:58	06/08/22 03:55	1
Toluene	<0.00202	U	0.00202	mg/Kg		06/07/22 14:58	06/08/22 03:55	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/07/22 14:58	06/08/22 03:55	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		06/07/22 14:58	06/08/22 03:55	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/07/22 14:58	06/08/22 03:55	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		06/07/22 14:58	06/08/22 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*06/07/22 14:58*	*06/08/22 03:55*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/07/22 14:58*	*06/08/22 03:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			06/10/22 09:57	1

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Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS01

Date Collected: 06/06/22 09:00
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 14:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 14:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*06/08/22 17:15*	*06/09/22 14:44*	*1*
o-Terphenyl	*94*		*70 - 130*	*06/08/22 17:15*	*06/09/22 14:44*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5120**		50.5		mg/Kg			06/09/22 23:39	10

Client Sample ID: SS05

Date Collected: 06/06/22 09:05
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 05:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 05:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 05:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/07/22 14:58	06/08/22 05:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 05:45	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/07/22 14:58	06/08/22 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*06/07/22 14:58*	*06/08/22 05:45*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/07/22 14:58*	*06/08/22 05:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			06/08/22 15:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/10/22 09:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 15:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 15:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/08/22 17:15	06/09/22 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*06/08/22 17:15*	*06/09/22 15:06*	*1*
o-Terphenyl	*118*		*70 - 130*	*06/08/22 17:15*	*06/09/22 15:06*	*1*

Client Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS05

Date Collected: 06/06/22 09:05
Date Received: 06/06/22 12:24
Sample Depth: 0.5'

Lab Sample ID: 890-2380-9

Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5020**		50.3		mg/Kg			06/09/22 23:48	10

Surrogate Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

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)
890-2374-A-5-C MS	Matrix Spike	108	100
890-2374-A-5-D MSD	Matrix Spike Duplicate	110	100
890-2380-1	SS06	107	97
890-2380-2	SS07	107	99
890-2380-3	SS08	116	100
890-2380-4	SS09	112	92
890-2380-5	SS04	112	100
890-2380-6	SS03	116	95
890-2380-7	SS02	108	93
890-2380-8	SS01	110	98
890-2380-9	SS05	112	98
LCS 880-27017/1-A	Lab Control Sample	108	99
LCSD 880-27017/2-A	Lab Control Sample Dup	108	97
MB 880-26988/5-A	Method Blank	98	100
MB 880-27017/5-A	Method Blank	99	95

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2380-1	SS06	113	111
890-2380-1 MS	SS06	95	82
890-2380-1 MSD	SS06	101	89
890-2380-2	SS07	85	85
890-2380-3	SS08	107	101
890-2380-4	SS09	106	102
890-2380-5	SS04	106	103
890-2380-6	SS03	109	110
890-2380-7	SS02	106	105
890-2380-8	SS01	96	94
890-2380-9	SS05	115	118
LCS 880-27115/2-A	Lab Control Sample	118	109
LCSD 880-27115/3-A	Lab Control Sample Dup	106	99
MB 880-27115/1-A	Method Blank	95	98

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-26988/5-A
Matrix: Solid
Analysis Batch: 26971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 26988

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/22 08:57	06/07/22 12:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/22 08:57	06/07/22 12:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/22 08:57	06/07/22 12:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/07/22 08:57	06/07/22 12:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/22 08:57	06/07/22 12:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/07/22 08:57	06/07/22 12:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*06/07/22 08:57*	*06/07/22 12:43*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/07/22 08:57*	*06/07/22 12:43*	*1*

Lab Sample ID: MB 880-27017/5-A
Matrix: Solid
Analysis Batch: 26971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 27017

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 00:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 00:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 00:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/07/22 14:58	06/08/22 00:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/22 14:58	06/08/22 00:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/07/22 14:58	06/08/22 00:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/07/22 14:58*	*06/08/22 00:22*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/07/22 14:58*	*06/08/22 00:22*	*1*

Lab Sample ID: LCS 880-27017/1-A
Matrix: Solid
Analysis Batch: 26971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 27017

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09392		mg/Kg		94	70 - 130		
Toluene			0.100	0.09786		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.09108		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.2075		mg/Kg		104	70 - 130		
o-Xylene			0.100	0.1041		mg/Kg		104	70 - 130		

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

Lab Sample ID: LCSD 880-27017/2-A
Matrix: Solid
Analysis Batch: 26971

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 27017

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08291		mg/Kg		83	70 - 130	12	35

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

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

Lab Sample ID: LCSD 880-27017/2-A
Matrix: Solid
Analysis Batch: 26971

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 27017

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09423		mg/Kg		94	70 - 130	4	35
Ethylbenzene			0.100	0.08889		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2054		mg/Kg		103	70 - 130	1	35
o-Xylene			0.100	0.1029		mg/Kg		103	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-2374-A-5-C MS
Matrix: Solid
Analysis Batch: 26971

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 27017

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.100	0.05763	F1	mg/Kg		58	70 - 130
Toluene	<0.00201	U	0.100	0.07360		mg/Kg		73	70 - 130
Ethylbenzene	<0.00201	U	0.100	0.07003		mg/Kg		70	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1634		mg/Kg		82	70 - 130
o-Xylene	<0.00201	U	0.100	0.08332		mg/Kg		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-2374-A-5-D MSD
Matrix: Solid
Analysis Batch: 26971

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 27017

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0990	0.07694		mg/Kg		78	70 - 130	29	35
Toluene	<0.00201	U	0.0990	0.08291		mg/Kg		84	70 - 130	12	35
Ethylbenzene	<0.00201	U	0.0990	0.07812		mg/Kg		79	70 - 130	11	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1796		mg/Kg		91	70 - 130	9	35
o-Xylene	<0.00201	U	0.0990	0.09055		mg/Kg		91	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-27115/1-A
Matrix: Solid
Analysis Batch: 27121

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 27115

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 10:28	1

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

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

Lab Sample ID: MB 880-27115/1-A
Matrix: Solid
Analysis Batch: 27121

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 27115

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 10:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/22 17:15	06/09/22 10:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*06/08/22 17:15*	*06/09/22 10:28*	*1*
o-Terphenyl	*98*		*70 - 130*	*06/08/22 17:15*	*06/09/22 10:28*	*1*

Lab Sample ID: LCS 880-27115/2-A
Matrix: Solid
Analysis Batch: 27121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 27115

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1105		mg/Kg		111	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1128		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*109*		*70 - 130*

Lab Sample ID: LCSD 880-27115/3-A
Matrix: Solid
Analysis Batch: 27121

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 27115

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	928.0		mg/Kg		93	70 - 130	17	20
Diesel Range Organics (Over C10-C28)			1000	1017		mg/Kg		102	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: 890-2380-1 MS
Matrix: Solid
Analysis Batch: 27121

Client Sample ID: SS06
Prep Type: Total/NA
Prep Batch: 27115

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	997	869.3		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	783.0		mg/Kg		77	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

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

Lab Sample ID: 890-2380-1 MSD
Matrix: Solid
Analysis Batch: 27121

Client Sample ID: SS06
Prep Type: Total/NA
Prep Batch: 27115

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	1000	1012		mg/Kg		97	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	855.9		mg/Kg		84	70 - 130	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-27034/1-A
Matrix: Solid
Analysis Batch: 27220

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/09/22 19:11	1

Lab Sample ID: LCS 880-27034/2-A
Matrix: Solid
Analysis Batch: 27220

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	264.6		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-27034/3-A
Matrix: Solid
Analysis Batch: 27220

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	254.6		mg/Kg		102	90 - 110	4	20

Lab Sample ID: 880-15527-A-2-C MS
Matrix: Solid
Analysis Batch: 27220

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	53.2		250	305.9		mg/Kg		101	90 - 110		

Lab Sample ID: 880-15527-A-2-D MSD
Matrix: Solid
Analysis Batch: 27220

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	53.2		250	312.8		mg/Kg		104	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

GC VOA

Analysis Batch: 26971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-1	SS06	Total/NA	Solid	8021B	27017
890-2380-2	SS07	Total/NA	Solid	8021B	27017
890-2380-3	SS08	Total/NA	Solid	8021B	27017
890-2380-4	SS09	Total/NA	Solid	8021B	27017
890-2380-5	SS04	Total/NA	Solid	8021B	27017
890-2380-6	SS03	Total/NA	Solid	8021B	27017
890-2380-7	SS02	Total/NA	Solid	8021B	27017
890-2380-8	SS01	Total/NA	Solid	8021B	27017
890-2380-9	SS05	Total/NA	Solid	8021B	27017
MB 880-26988/5-A	Method Blank	Total/NA	Solid	8021B	26988
MB 880-27017/5-A	Method Blank	Total/NA	Solid	8021B	27017
LCS 880-27017/1-A	Lab Control Sample	Total/NA	Solid	8021B	27017
LCSD 880-27017/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	27017
890-2374-A-5-C MS	Matrix Spike	Total/NA	Solid	8021B	27017
890-2374-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	27017

Prep Batch: 26988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-26988/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 27017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-1	SS06	Total/NA	Solid	5035	
890-2380-2	SS07	Total/NA	Solid	5035	
890-2380-3	SS08	Total/NA	Solid	5035	
890-2380-4	SS09	Total/NA	Solid	5035	
890-2380-5	SS04	Total/NA	Solid	5035	
890-2380-6	SS03	Total/NA	Solid	5035	
890-2380-7	SS02	Total/NA	Solid	5035	
890-2380-8	SS01	Total/NA	Solid	5035	
890-2380-9	SS05	Total/NA	Solid	5035	
MB 880-27017/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-27017/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-27017/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2374-A-5-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2374-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 27106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-1	SS06	Total/NA	Solid	Total BTEX	
890-2380-2	SS07	Total/NA	Solid	Total BTEX	
890-2380-3	SS08	Total/NA	Solid	Total BTEX	
890-2380-4	SS09	Total/NA	Solid	Total BTEX	
890-2380-5	SS04	Total/NA	Solid	Total BTEX	
890-2380-6	SS03	Total/NA	Solid	Total BTEX	
890-2380-7	SS02	Total/NA	Solid	Total BTEX	
890-2380-8	SS01	Total/NA	Solid	Total BTEX	
890-2380-9	SS05	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

GC Semi VOA

Prep Batch: 27115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-1	SS06	Total/NA	Solid	8015NM Prep	
890-2380-2	SS07	Total/NA	Solid	8015NM Prep	
890-2380-3	SS08	Total/NA	Solid	8015NM Prep	
890-2380-4	SS09	Total/NA	Solid	8015NM Prep	
890-2380-5	SS04	Total/NA	Solid	8015NM Prep	
890-2380-6	SS03	Total/NA	Solid	8015NM Prep	
890-2380-7	SS02	Total/NA	Solid	8015NM Prep	
890-2380-8	SS01	Total/NA	Solid	8015NM Prep	
890-2380-9	SS05	Total/NA	Solid	8015NM Prep	
MB 880-27115/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-27115/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-27115/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2380-1 MS	SS06	Total/NA	Solid	8015NM Prep	
890-2380-1 MSD	SS06	Total/NA	Solid	8015NM Prep	

Analysis Batch: 27121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-1	SS06	Total/NA	Solid	8015B NM	27115
890-2380-2	SS07	Total/NA	Solid	8015B NM	27115
890-2380-3	SS08	Total/NA	Solid	8015B NM	27115
890-2380-4	SS09	Total/NA	Solid	8015B NM	27115
890-2380-5	SS04	Total/NA	Solid	8015B NM	27115
890-2380-6	SS03	Total/NA	Solid	8015B NM	27115
890-2380-7	SS02	Total/NA	Solid	8015B NM	27115
890-2380-8	SS01	Total/NA	Solid	8015B NM	27115
890-2380-9	SS05	Total/NA	Solid	8015B NM	27115
MB 880-27115/1-A	Method Blank	Total/NA	Solid	8015B NM	27115
LCS 880-27115/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	27115
LCSD 880-27115/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	27115
890-2380-1 MS	SS06	Total/NA	Solid	8015B NM	27115
890-2380-1 MSD	SS06	Total/NA	Solid	8015B NM	27115

Analysis Batch: 27276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-1	SS06	Total/NA	Solid	8015 NM	
890-2380-2	SS07	Total/NA	Solid	8015 NM	
890-2380-3	SS08	Total/NA	Solid	8015 NM	
890-2380-4	SS09	Total/NA	Solid	8015 NM	
890-2380-5	SS04	Total/NA	Solid	8015 NM	
890-2380-6	SS03	Total/NA	Solid	8015 NM	
890-2380-7	SS02	Total/NA	Solid	8015 NM	
890-2380-8	SS01	Total/NA	Solid	8015 NM	
890-2380-9	SS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 27034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-1	SS06	Soluble	Solid	DI Leach	
890-2380-2	SS07	Soluble	Solid	DI Leach	
890-2380-3	SS08	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

HPLC/IC (Continued)

Leach Batch: 27034 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-4	SS09	Soluble	Solid	DI Leach	
890-2380-5	SS04	Soluble	Solid	DI Leach	
890-2380-6	SS03	Soluble	Solid	DI Leach	
890-2380-7	SS02	Soluble	Solid	DI Leach	
890-2380-8	SS01	Soluble	Solid	DI Leach	
890-2380-9	SS05	Soluble	Solid	DI Leach	
MB 880-27034/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27034/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27034/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-15527-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-15527-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 27220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2380-1	SS06	Soluble	Solid	300.0	27034
890-2380-2	SS07	Soluble	Solid	300.0	27034
890-2380-3	SS08	Soluble	Solid	300.0	27034
890-2380-4	SS09	Soluble	Solid	300.0	27034
890-2380-5	SS04	Soluble	Solid	300.0	27034
890-2380-6	SS03	Soluble	Solid	300.0	27034
890-2380-7	SS02	Soluble	Solid	300.0	27034
890-2380-8	SS01	Soluble	Solid	300.0	27034
890-2380-9	SS05	Soluble	Solid	300.0	27034
MB 880-27034/1-A	Method Blank	Soluble	Solid	300.0	27034
LCS 880-27034/2-A	Lab Control Sample	Soluble	Solid	300.0	27034
LCSD 880-27034/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27034
880-15527-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	27034
880-15527-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	27034

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS06
Date Collected: 06/06/22 08:25
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-1
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	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 01:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 11:31	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		10			27220	06/09/22 22:16	CH	EET MID

Client Sample ID: SS07
Date Collected: 06/06/22 08:30
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 01:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 12:34	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		1			27220	06/09/22 22:25	CH	EET MID

Client Sample ID: SS08
Date Collected: 06/06/22 08:35
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 02:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 12:55	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		1			27220	06/09/22 22:53	CH	EET MID

Client Sample ID: SS09
Date Collected: 06/06/22 08:40
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 02:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS09
Date Collected: 06/06/22 08:40
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 13:16	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		5			27220	06/09/22 23:02	CH	EET MID

Client Sample ID: SS04
Date Collected: 06/06/22 08:45
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 02:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 13:38	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		10			27220	06/09/22 23:11	CH	EET MID

Client Sample ID: SS03
Date Collected: 06/06/22 08:50
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 03:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 13:59	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		10			27220	06/09/22 23:20	CH	EET MID

Client Sample ID: SS02
Date Collected: 06/06/22 08:55
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 03:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 14:21	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Client Sample ID: SS02
Date Collected: 06/06/22 08:55
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		10			27220	06/09/22 23:29	CH	EET MID

Client Sample ID: SS01
Date Collected: 06/06/22 09:00
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 03:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 14:44	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		10			27220	06/09/22 23:39	CH	EET MID

Client Sample ID: SS05
Date Collected: 06/06/22 09:05
Date Received: 06/06/22 12:24

Lab Sample ID: 890-2380-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	27017	06/07/22 14:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	26971	06/08/22 05:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			27106	06/08/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			27276	06/10/22 09:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27115	06/08/22 17:15	DM	EET MID
Total/NA	Analysis	8015B NM		1			27121	06/09/22 15:06	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	27034	06/07/22 16:09	SMC	EET MID
Soluble	Analysis	300.0		10			27220	06/09/22 23:48	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

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	06-30-22

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

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

Method Summary

Client: Ensolum
Project/Site: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

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: BEU Connector PW Booster

Job ID: 890-2380-1
SDG: 03E1558045

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2380-1	SS06	Solid	06/06/22 08:25	06/06/22 12:24	0.5'
890-2380-2	SS07	Solid	06/06/22 08:30	06/06/22 12:24	0.5'
890-2380-3	SS08	Solid	06/06/22 08:35	06/06/22 12:24	0.5'
890-2380-4	SS09	Solid	06/06/22 08:40	06/06/22 12:24	0.5'
890-2380-5	SS04	Solid	06/06/22 08:45	06/06/22 12:24	0.5'
890-2380-6	SS03	Solid	06/06/22 08:50	06/06/22 12:24	0.5'
890-2380-7	SS02	Solid	06/06/22 08:55	06/06/22 12:24	0.5'
890-2380-8	SS01	Solid	06/06/22 09:00	06/06/22 12:24	0.5'
890-2380-9	SS05	Solid	06/06/22 09:05	06/06/22 12:24	0.5'

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Belill	Bill to: (if different)	Adrian Baker
Company Name:	Ensolum	Company Name:	XTO
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	Email:	bbelill@ensolum.com	

Work Order Comments

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

Project Name:	BEU Corrector PW Buster	Turn Around	☑ Routine ☐ Rush
Project Number:	03E155 8045	Due Date:	
Project Location:	32.2907, -103.8615	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kose Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Samples Received Intact:	Yes (No)	Thermometer ID:	T-NM-00
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	29.6
Total Containers:		Corrected Temperature:	29.4

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	BTEX	TPH	Chlorides	Sample Comments
SS01	S	6/6/22	0825	0.5ft			X	X	X	Incident #:
SS02			0830							nAPP2213514124
SS03			0835							CC: 10870011001
SS04			0840							
SS05			0845							
SS06			0850							
SS07			0855							
SS08			0900							
SS09	V	V	0905	V			V	V	V	

CIP-cooling in process

890-2380 Chain of Custody

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

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		Amanda Stuff	6/16/22 12:34			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2380-1
SDG Number: 03E1558045

Login Number: 2380
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: 890-2380-1
SDG Number: 03E1558045

Login Number: 2380
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 06/07/22 12:08 PM

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

ENSOLUM

APPENDIX E

NMOCD Notifications

From: Hamlet, Robert, EMNRD
To: Collins, Melanie
Cc: DelawareSpills /SM; Pennington, Shelby G; Green, Garrett J; Ben Belill; Tacoma Morrissey; Kalei Jennings; Bratcher, Mike, EMNRD; Nobui, Jennifer, EMNRD; Harimon, Jocelyn, EMNRD
Subject: (Extension Approval) - XTO - BEU Connector PW Booster / NAPP2213151424
Date: Friday, July 22, 2022 4:42:46 PM
Attachments: image002.jpg
image003.png

[**EXTERNAL EMAIL**]

RE: Incident #**NAPP2213151424**

Melanie,

Your request for an extension to **October 24th, 2022** is approved. Please keep us up to date on the Right of Entry (ROE) Permit. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet ● Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Friday, July 22, 2022 1:56 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Pennington, Shelby G <shelby.g.pennington@exxonmobil.com>; Green, Garrett J <garrett.green@exxonmobil.com>; bbelill@ensolum.com; Tacoma Morrissey <tmorrissey@ensolum.com>; Kalei Jennings <kjennings@ensolum.com>
Subject: [EXTERNAL] XTO - Extension Request - BEU Connector PW Booster / NAPP2213151424

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

XTO is requesting an extension of the current deadline of July 26, 2022, for submitting a

remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the BEU Connector PW Booster (Incident Number NAPP2213151424). The release occurred on April 27, 2022 and an initial site assessment of the release was conducted. Fluids were released into the pasture area due to a flanged-end fitting separating from a hose while moving produced water. Initial assessment and sampling was conducted and excavation is pending. A Right of Entry (ROE) Permit was submitted to the State Land Office (SLO) in July 2022 and the executed permit has yet to be received. In order to complete the remediation work and submit a remediation work plan or closure report XTO requests a 90-day extension of this deadline until October 24, 2022.

Thank you,

Melanie Collins

Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756

From: Green, Garrett J
To: ocd.enviro@state.nm.us; Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD
Cc: Tacoma Morrissey; Kalei Jennings; DelawareSpills /SM
Subject: XTO - Sampling Notification (Week of 8/1/22 - 8/5/22)
Date: Friday, July 29, 2022 4:11:00 PM

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of August 1, 2022.

Monday
- PLU C1 Frac Pond / NAPP2207743395
- BEU Connector PW Booster / nAPP2213151424

Tuesday
- BEU Connector PW Booster / nAPP2213151424
- Goldenchild CTB / nAPP2035256230, nAPP2102237559, nAPP2101335437, & nAPP2101331137

Wednesday
- BEU Connector PW Booster / nAPP2213151424
- Ross Draw 25 NW Battery / NAPP2201444794

Thursday
- PLU 89 / NRM1932350962

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 D

Proposed Reclamation Plan

PROPOSED RECLAMATION PLAN

The release occurred off pad in the pasture within the pipeline ROW and as such, a reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the off pad area that was impacted by the release per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation. The following Reclamation Plan addresses reclamation of the off-pad area:

- The excavation will be backfilled with locally sourced caliche and topsoil to match surrounding grade. Topsoil will be placed on top of the caliche to support vegetative growth within the disturbed area;
- Soil and vegetation will be assessed during excavation activities to determine the proper weed-free seed mix designed by the NMSLO to meet reclamation standards for this region;
- The seed mixture will be distributed with one or more of the following mechanisms: push broadcaster seed spreader / tractor operated broadcast seed spreader / drill seeding / other means;
- Application of the seed mixture will be at a coverage of 10 pounds of seeds per acre of reclaimed pasture with distribution by a drilling method or 20 pounds of seeds per acre of reclaimed pasture with distribution by a broadcast method;
- Erosion control management will potentially include:
    - The placement of waddles in areas with a propensity for high run off rates;
    - Straw cover if high winds are anticipated to support moisture retention and limit wind from blowing seeds away before they have had time to germinate; and/or
    - Other erosional control best management practices (BMP) as necessary to support timely and healthy regrowth of vegetation in disturbed areas;
- Backfilling of the excavation will be completed following receipt of confirmation soil samples indicating all chemicals of concern concentrations are in compliance with the Closure Criteria and/or the reclamation requirement;
- Seeding is anticipated to be completed in when temperatures and precipitation is most conducive for vegetation growth. In general, seeding should occur approximately one month after the last frost in the Spring up until approximately one month prior to the first fall frost. NMSLO has recognized the optimal time to seed is between July and early September, which will be adhered to for this Site;
- If seeding occurs outside of the 180 days approved in the current fully executed ROE Permit, a new ROE Permit will be executed prior to entering the pasture for reclamation activities;
- Annual inspections (at a minimum) will take place on the location until revegetation is consistent with local natural vegetation density. The Site will be inspected the following Spring/Fall to assess the success of regrowth. If necessary, an additional application of the NMSLO-approved pure live seed mixture will be applied as well as any needed BMPs will be installed to support growth and limit erosion;
- Upon completion of revegetation, a copy of the C-103 submitted to NMOCD will also be submitted to NMSLO for final inspection and release.

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 279690

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 279690
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	The Remediation Plan is Conditionally Approved. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site Assessment/characterization/proven depth to water determination. Sidewall samples need to be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The variance for confirmation samples every 500 ft2 is approved. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. The work will need to occur in 90 days after the work plan has been approved.	3/12/2024
bhall	Submit a complete remediation and reclamation report through the OCD Permitting website by 6/12/2024. The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer; and a revegetation plan.	3/12/2024
bhall	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	3/12/2024