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	NVV2002451789
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # *(assigned by OCD)*
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.148944 Longitude -103.921771
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Muy Wayno Recycling Facility Pond	Site Type Recycling Facility
Date Release Discovered 12/28/2019	API# *(if applicable)* 30-015-37700 (Muy Wayno State #001H))

Unit Letter	Section	Township	Range	County
C	7	25S	30E	EDDY

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls) 0.0	Volume Recovered (bbls) 0.0
☒ Produced Water	Volume Released (bbls) 553.95	Volume Recovered (bbls) 544.0
	Is the concentration of dissolved chloride 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 connection on the produced water lay flat hose failed and the line ruptured. This resulted in a release into impermeable containment consisting of 540 bbls and 13.95 bbls onto caliche pad. A total of 553.95 bbls of produced water were released with 544 bbls recovered. Additional third party resources have been retained to assist in the remediation.

State of New Mexico
Oil Conservation Division

Incident ID	NVV2002451789
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? YES – An unauthorized release of fluid over 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 Kyle Littrell : 'Mike Bratcher'; 'Rob Hamlet'; 'Victoria Venegas'; 'Griswold, Jim, EMNRD'; Mann, Ryan : by email December 28, 2019 at 11:39 AM.	

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:

N/A

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: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 1/10/2019

email: Kyle_Littrell@xtoenergy.com Telephone:

OCD Only

Received by: Victoria Venegas Date: 01/24/2020

State of New Mexico
Oil Conservation Division

Incident ID	NVV2002451789
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NVV2002451789
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: _____Kyle Littrell_____ Title: _____SH&E Coordinator_____

Signature:_____ _____ Date: ___03/26/2020 _

email: _____ Kyle_Littrell@xtoenergy.com _____ Telephone: ____(432)-221-7331_____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NVV2002451789
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: Kyle Littrell Title: SH&E Coordinator

Signature: Date: 03/26/2020

email: Kyle_Littrell@xtoenergy.com Telephone: (432)-221-7331

OCD Only

Received by: Victoria Venegas Date: 03/26/2020

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

Signature: Date: 05/01/2020

Incident ID	NVV2002451789
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Garrett Green Title: Environmental Coordinator

Signature: Garrett Green Date: 06/19/2023

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

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Shelly Wells Date: 11/20/2023

Printed Name: Shelly Wells Title: Environmental Specialist-Advanced

ENSOLUM

June 19, 2023

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

Re: Closure Request
Muy Wayno Recycling Facility
Incident Number NVV2002451789
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Closure Request* as a follow-up to the *Deferral Request* dated March 26, 2020. This *Closure Request* provides an update to the previously conducted excavation and soil sampling activities at the Muy Wayno Recycling Facility (Site). Removal of a lined tank containment allowed for completion of remediation. Based on the additional remediation activities described below, XTO is submitting this *Closure Request* and requesting no further action and closure for Incident Number NVV2002451789.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit C, Section 7, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.148944°, -103.921771°) and is associated with oil and gas exploration and production operations on State Land.

On December 28, 2019, a connection to a produced water lay flat hose failed resulting in the line rupturing. Approximately 553.95 barrels (bbls) of produced water were released, into an impermeable lined containment. Approximately 544 bbls of produced water were recovered via hydrovacuum truck, however, 13.95 bbls were released onto the pad. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) within 24 hours and on a subsequent Release Notification and Corrective Action Form C-141 (Form C-141) on January 10, 2020. The release was assigned Incident Number NVV2002451789.

BACKGROUND

The original *Deferral Request* detailed site characterization according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the NMAC. Results from the site characterization 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, the following NMOCD Table I Closure Criteria (Closure Criteria) were applied:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg

- Total Petroleum Hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

In February 2020, excavation activities were conducted at the Site to address the impacted soil resulting from the December 28, 2019, produced water release. Impacted soil was excavated to the maximum extent possible; however, an estimated 75 cubic yards of impacted soil were left in place for compliance with XTO safety policy regarding earth-moving activities within two feet of active production equipment and pipelines. This policy was enforced where impacted soil was identified within two feet of the lined impermeable tank containment in excavation sidewall sample SW04. The impacted soil left in-place was laterally and vertically delineated to below the Site Closure Criteria. Additional details regarding the excavation and soil sampling activities can be referenced in the original *Deferral Request,* submitted to NMOCD on March 26, 2020.

On May 1, 2020, NMOCD approved the *Deferral Request* for Incident Number NVV2002451789. During a recent inspection of the Site, it was confirmed that the lined tank containment had been removed from the Site. Based on removal of the tank and containment and access to the original deferral area, final remediation of the Site was scheduled.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

During April 2023, Ensolum personnel were at the Site to oversee excavation activities to remove the impacted soil remaining in-place in the former tank containment area, as indicated by original excavation sidewall sample SW04 collected from ground surface to 2.5 feet bgs. The location of the tank containment, deferral area, and sidewall soil sample SW04 are depicted on Figure 2. Excavation activities were performed using a backhoe and transport vehicles. To direct excavation activities, soil was screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The excavation was completed to a depth of 2.5 feet bgs. Photographic documentation of the excavation activities is included in Appendix A.

Following removal of the impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS27 through FS29 were collected from the floor of the excavation at a depth of 2.5 feet bgs. Composite sidewall soil sample SW05 was collected from the sidewalls of the excavation at depths ranging from the ground surface to 2.5 feet bgs. The excavation extent and excavation soil sample locations are presented on Figure 3.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for excavation floor samples FS27 through FS29 and excavation sidewall sample SW05 indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix B.

The excavation area measured approximately 460 square feet. A total of 45 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported and properly disposed

of at the R360 Facility in Hobbs, New Mexico. The excavation was backfilled with locally procured caliche and contoured to match the surrounding grade.

CLOSURE REQUEST

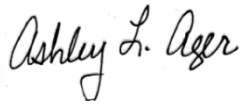
Site assessment and excavation activities were conducted at the Site to address the December 28, 2019, produced water release and deferral area. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COCs were compliant with the Site Closure Criteria. Based on the soil sample analytical results, no further remediation was required.

Initial response efforts and excavation of deferred impacted soil have mitigated impacts at this Site. XTO believes the remedial actions completed are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NVV2002451789.

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
Senior Geologist



Ashley Ager, P.G.
Program Director

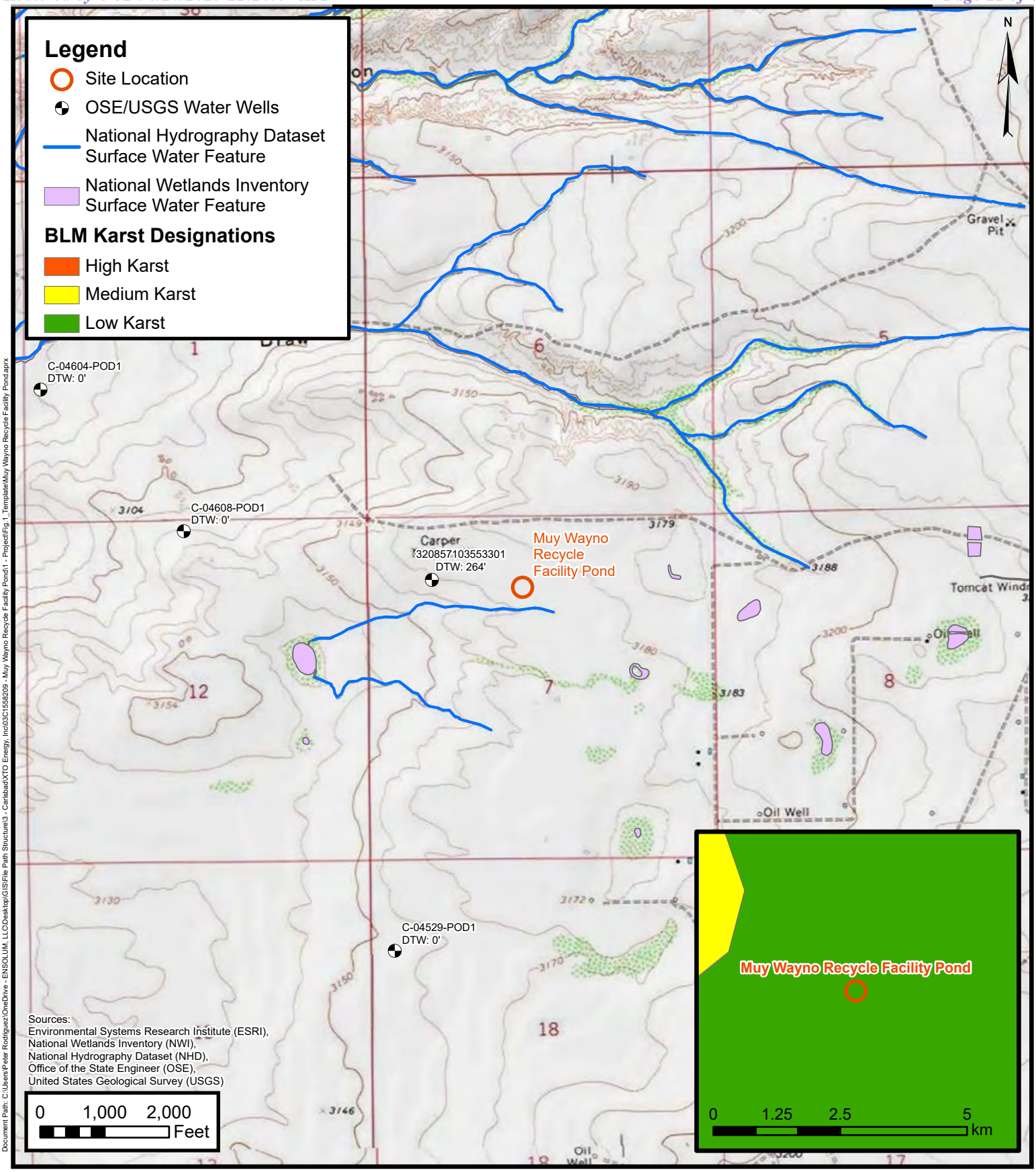
cc: Garrett Green, XTO
Shelby Pennington, XTO
Bureau of Land Management

Appendices:

Figure 1	Site Receptor Map
Figure 2	Deferral Area
Figure 2	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Photographic Log
Appendix B	Laboratory Analytical Reports & Chain-of-Custody Documentation (2023)
Appendix C	NMOCD Notifications

ENSOLUM

FIGURES



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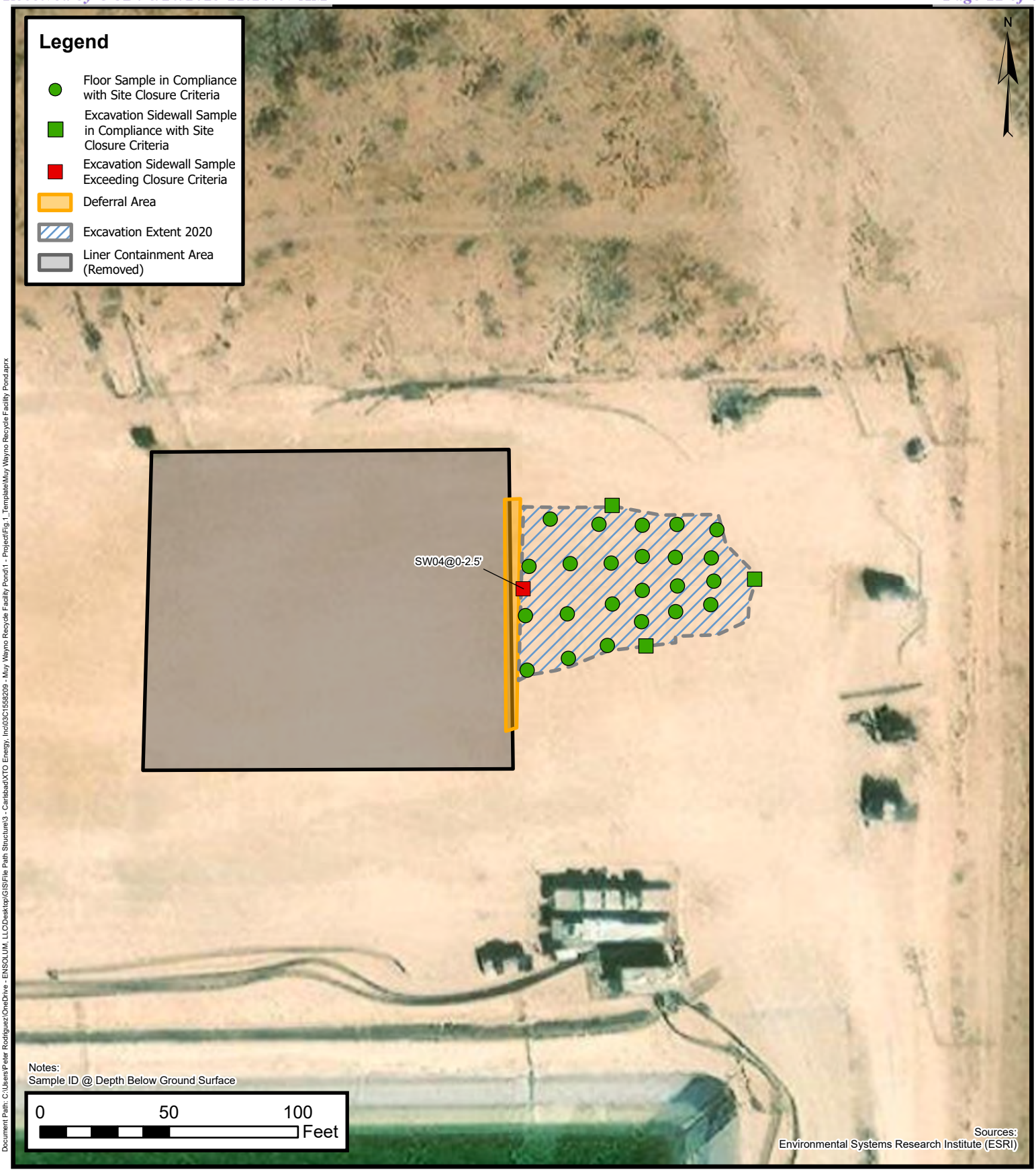
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

XTO Energy, Inc
Muy Wayno Recycle Facility Pond
Incident Number: NVV2002451789
Unit C, Sec. 7, T25S, R30E
Eddy County, New Mexico

FIGURE
1



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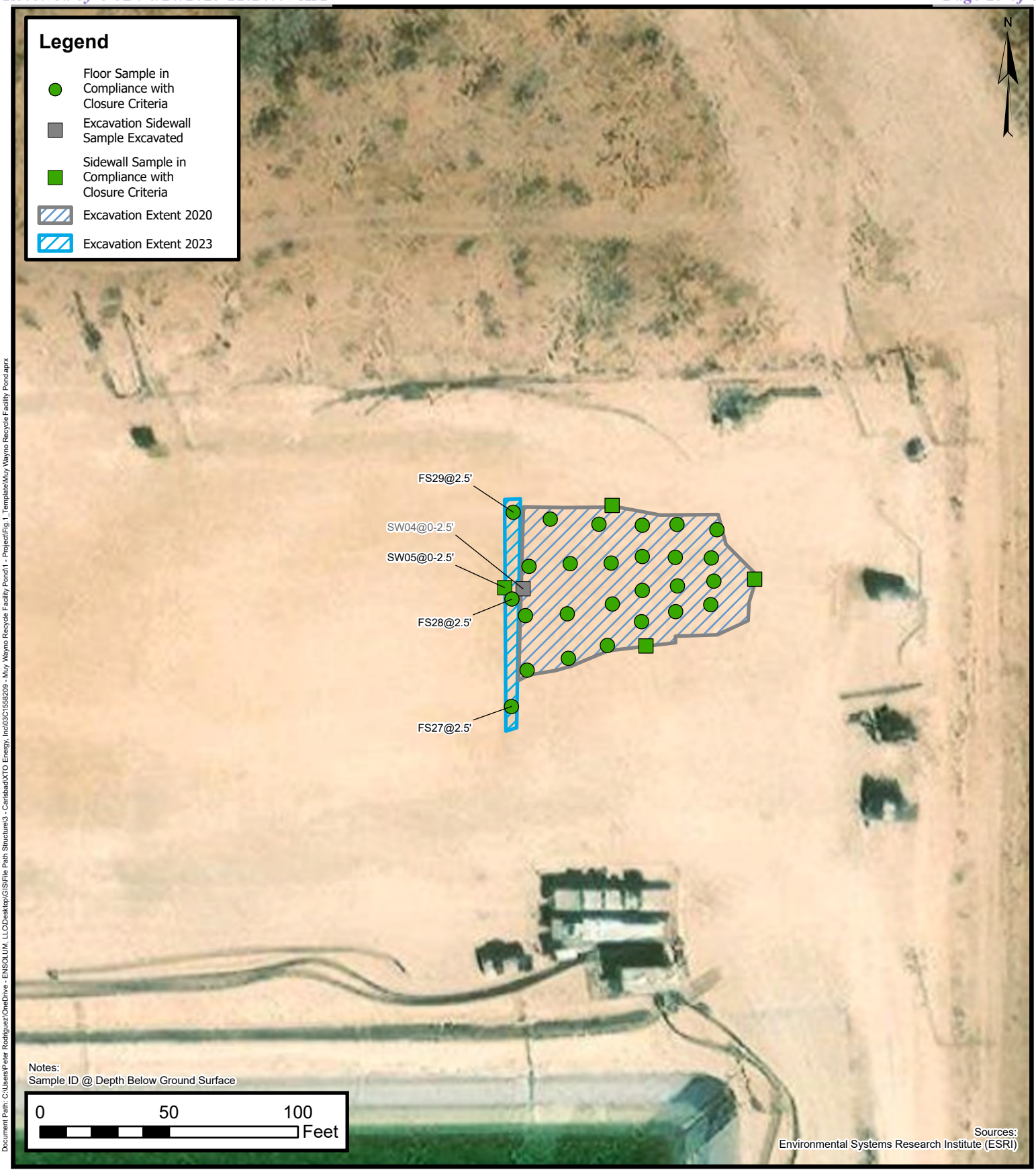
Environmental, Engineering and Hydrogeologic Consultants

Deferral Area Map

XTO Energy, Inc
Muy Wayno Recycle Facility Pond
Incident Number: NVV2002451789
Unit C, Sec. 7, T25S, R30E
Eddy County, New Mexico

FIGURE
2



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Environmental, Engineering and Hydrogeologic Consultants

Excavation Soil Sample Locations

XTO Energy, Inc
Muy Wayno Recycle Facility Pond
Incident Number: NVV2002451789
Unit C, Sec. 7, T25S, R30E
Eddy County, New Mexico

FIGURE

3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Muy Wayno Recycling Facility Pond
XTO Energy, Inc.
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**10,000**
Confirmation Soil Samples										
FS27	04/17/2023	2.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	397
FS28	04/17/2023	2.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	506
FS29	04/17/2023	2.5	<0.00201	<0.00402	<49.9	60.3	<49.9	60.3	60.3	394
~~SW04~~	~~02/27/2020~~	~~0-2.5~~	~~<0.00200~~	~~<0.00201~~	~~<50.0~~	~~<50.0~~	~~<50.0~~	~~<50.0~~	~~<50.0~~	~~**3,090**~~
SW05	04/17/2023	0-2.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	516

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation requirement where applicable.
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon
NMAC: New Mexico Administrative Code
~~Grey~~ text indicates soil sample removed during excavation activities

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APPENDIX A

Photographic Log

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Photographic Log
XTO Energy, Inc.
Muy Wayno Recycle Facility Pond
NV2002451789

Photograph 1 Date: April 17, 2023

Description: View of excavation facing northeast.

Photograph 2 Date: April 17, 2023

Description: View of excavation facing southeast.

ENSOLUM

APPENDIX B

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

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JOB DESCRIPTION

Muy Wayno Recycle Facility
SDG NUMBER 03C1558209

JOB NUMBER

890-4532-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

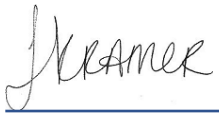
Eurofins Carlsbad

Job Notes

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

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

Authorization



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

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Laboratory Job ID: 890-4532-1
SDG: 03C1558209

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-4532-1
Project/Site: Muy Wayno Recycle Facility SDG: 03C1558209

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, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Job ID: 890-4532-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4532-1

Receipt
The samples were received on 4/17/2023 4:36 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS27 (890-4532-1), FS28 (890-4532-2), FS29 (890-4532-3) and SW05 (890-4532-4).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-51573 recovered above the upper control limit for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-27315-A-1-A MS). 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 880-51473 and analytical batch 880-51573 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-51528 and analytical batch 880-51456 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS27 (890-4532-1), (890-4531-A-1-B), (890-4531-A-1-C MS) and (890-4531-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS28 (890-4532-2), FS29 (890-4532-3) and SW05 (890-4532-4). 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 880-51528 and analytical batch 880-51456 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-51747 and analytical batch 880-51980 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.The associated sample is: FS27 (890-4532-1).

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: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Client Sample ID: FS27

Lab Sample ID: 890-4532-1
Matrix: Solid
Date Collected: 04/17/23 13:50
Date Received: 04/17/23 16:36
Sample Depth: 2.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/19/23 12:00	04/20/23 18:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/19/23 12:00	04/20/23 18:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/19/23 12:00	04/20/23 18:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/19/23 12:00	04/20/23 18:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/19/23 12:00	04/20/23 18:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/19/23 12:00	04/20/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*04/19/23 12:00*	*04/20/23 18:56*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*04/19/23 12:00*	*04/20/23 18:56*	*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			04/21/23 13:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			04/20/23 09:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/19/23 14:56	04/20/23 01:08	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/19/23 14:56	04/20/23 01:08	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/19/23 14:56	04/20/23 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*149*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/20/23 01:08*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/20/23 01:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**397**		25.3		mg/Kg			04/25/23 18:13	5

Client Sample ID: FS28

Lab Sample ID: 890-4532-2
Matrix: Solid
Date Collected: 04/17/23 13:55
Date Received: 04/17/23 16:36
Sample Depth: 2.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/19/23 12:00	04/20/23 19:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/19/23 12:00	04/20/23 19:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/19/23 12:00	04/20/23 19:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/19/23 12:00	04/20/23 19:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/19/23 12:00	04/20/23 19:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/19/23 12:00	04/20/23 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*04/19/23 12:00*	*04/20/23 19:22*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Client Sample ID: FS28

Lab Sample ID: 890-4532-2
Matrix: Solid
Date Collected: 04/17/23 13:55
Date Received: 04/17/23 16:36
Sample Depth: 2.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*04/19/23 12:00*	*04/20/23 19:22*	*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			04/21/23 13:10	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			04/20/23 09:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/19/23 14:56	04/20/23 01:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/23 14:56	04/20/23 01:50	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/23 14:56	04/20/23 01:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*152*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/20/23 01:50*	*1*
o-Terphenyl	*145*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/20/23 01:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**506**		25.0	mg/Kg			04/25/23 18:18	5

Client Sample ID: FS29

Lab Sample ID: 890-4532-3
Matrix: Solid
Date Collected: 04/17/23 14:00
Date Received: 04/17/23 16:36
Sample Depth: 2.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/19/23 12:00	04/20/23 19:48	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/19/23 12:00	04/20/23 19:48	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/19/23 12:00	04/20/23 19:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/19/23 12:00	04/20/23 19:48	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/19/23 12:00	04/20/23 19:48	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/19/23 12:00	04/20/23 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*04/19/23 12:00*	*04/20/23 19:48*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*04/19/23 12:00*	*04/20/23 19:48*	*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			04/21/23 13:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**60.3**		49.9	mg/Kg			04/20/23 09:13	1

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Client Sample Results

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Client Sample ID: FS29

Lab Sample ID: 890-4532-3
Matrix: Solid
Date Collected: 04/17/23 14:00
Date Received: 04/17/23 16:36
Sample Depth: 2.5

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		04/19/23 14:56	04/20/23 06:35	1
Diesel Range Organics (Over C10-C28)	**60.3**		49.9		mg/Kg		04/19/23 14:56	04/20/23 06:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/19/23 14:56	04/20/23 06:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/20/23 06:35*	*1*
o-Terphenyl	*147*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/20/23 06:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**394**		25.2		mg/Kg			04/25/23 18:32	5

Client Sample ID: SW05

Lab Sample ID: 890-4532-4
Matrix: Solid
Date Collected: 04/17/23 14:15
Date Received: 04/17/23 16:36
Sample Depth: 0 - 2.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/19/23 12:00	04/20/23 20:14	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/19/23 12:00	04/20/23 20:14	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/19/23 12:00	04/20/23 20:14	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/19/23 12:00	04/20/23 20:14	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/19/23 12:00	04/20/23 20:14	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/19/23 12:00	04/20/23 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*04/19/23 12:00*	*04/20/23 20:14*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*04/19/23 12:00*	*04/20/23 20:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			04/21/23 13:10	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			04/20/23 09:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/19/23 14:56	04/20/23 06:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/19/23 14:56	04/20/23 06:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/19/23 14:56	04/20/23 06:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*146*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/20/23 06:56*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/20/23 06:56*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Client Sample ID: SW05
Date Collected: 04/17/23 14:15
Date Received: 04/17/23 16:36
Sample Depth: 0 - 2.5

Lab Sample ID: 890-4532-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	516		25.0		mg/Kg			04/25/23 18:37	5

Surrogate Summary

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-27315-A-1-A MS	Matrix Spike	90	66 S1-
880-27315-A-1-B MSD	Matrix Spike Duplicate	107	76
890-4532-1	FS27	114	71
890-4532-2	FS28	115	83
890-4532-3	FS29	120	76
890-4532-4	SW05	117	76
LCS 880-51473/1-A	Lab Control Sample	110	86
LCSD 880-51473/2-A	Lab Control Sample Dup	109	82
MB 880-51473/5-A	Method Blank	70	79

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)
890-4531-A-1-C MS	Matrix Spike	157 S1+	130
890-4531-A-1-D MSD	Matrix Spike Duplicate	150 S1+	126
890-4532-1	FS27	149 S1+	140 S1+
890-4532-2	FS28	152 S1+	145 S1+
890-4532-3	FS29	155 S1+	147 S1+
890-4532-4	SW05	146 S1+	139 S1+
LCS 880-51528/2-A	Lab Control Sample	122	114
LCSD 880-51528/3-A	Lab Control Sample Dup	120	114
MB 880-51528/1-A	Method Blank	156 S1+	160 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-51473/5-A
Matrix: Solid
Analysis Batch: 51573

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51473

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/19/23 10:41	04/20/23 12:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/19/23 10:41	04/20/23 12:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/19/23 10:41	04/20/23 12:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/19/23 10:41	04/20/23 12:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/19/23 10:41	04/20/23 12:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/19/23 10:41	04/20/23 12:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*04/19/23 10:41*	*04/20/23 12:39*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*04/19/23 10:41*	*04/20/23 12:39*	*1*

Lab Sample ID: LCS 880-51473/1-A
Matrix: Solid
Analysis Batch: 51573

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51473

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09822		mg/Kg		98	70 - 130		
Toluene			0.100	0.09510		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.1064		mg/Kg		106	70 - 130		
m-Xylene & p-Xylene			0.200	0.2079		mg/Kg		104	70 - 130		
o-Xylene			0.100	0.1045		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: LCSD 880-51473/2-A
Matrix: Solid
Analysis Batch: 51573

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51473

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09469		mg/Kg		95	70 - 130	4	35
Toluene			0.100	0.09602		mg/Kg		96	70 - 130	1	35
Ethylbenzene			0.100	0.1000		mg/Kg		100	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1958		mg/Kg		98	70 - 130	6	35
o-Xylene			0.100	0.09700		mg/Kg		97	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*

Lab Sample ID: 880-27315-A-1-A MS
Matrix: Solid
Analysis Batch: 51573

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51473

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U F2 F1	0.0998	0.01602	F1	mg/Kg		16	70 - 130		
Toluene	<0.00198	U F1	0.0998	0.01530	F1	mg/Kg		15	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

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

Lab Sample ID: 880-27315-A-1-A MS
Matrix: Solid
Analysis Batch: 51573

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51473

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U F1	0.0998	0.01656	F1	mg/Kg		17	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1	0.200	0.009926	F1	mg/Kg		5	70 - 130
o-Xylene	<0.00198	U F1	0.0998	0.03031	F1	mg/Kg		30	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*66*	*S1-*	*70 - 130*

Lab Sample ID: 880-27315-A-1-B MSD
Matrix: Solid
Analysis Batch: 51573

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 51473

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F2 F1	0.100	0.009884	F2 F1	mg/Kg		10	70 - 130	47	35
Toluene	<0.00198	U F1	0.100	0.01078	F1	mg/Kg		11	70 - 130	35	35
Ethylbenzene	<0.00198	U F1	0.100	0.01205	F1	mg/Kg		12	70 - 130	32	35
m-Xylene & p-Xylene	<0.00396	U F1	0.201	0.01076	F1	mg/Kg		5	70 - 130	8	35
o-Xylene	<0.00198	U F1	0.100	0.02355	F1	mg/Kg		23	70 - 130	25	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*

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

Lab Sample ID: MB 880-51528/1-A
Matrix: Solid
Analysis Batch: 51456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51528

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/19/23 14:56	04/19/23 20:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/23 14:56	04/19/23 20:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/23 14:56	04/19/23 20:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*156*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/19/23 20:06*	*1*
o-Terphenyl	*160*	*S1+*	*70 - 130*	*04/19/23 14:56*	*04/19/23 20:06*	*1*

Lab Sample ID: LCS 880-51528/2-A
Matrix: Solid
Analysis Batch: 51456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	987.3		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	979.6		mg/Kg		98	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

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

Lab Sample ID: LCS 880-51528/2-A
Matrix: Solid
Analysis Batch: 51456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51528

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: LCSD 880-51528/3-A
Matrix: Solid
Analysis Batch: 51456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51528

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	937.8		mg/Kg		94	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	934.4		mg/Kg		93	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: 890-4531-A-1-C MS
Matrix: Solid
Analysis Batch: 51456

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51528

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	1297		mg/Kg		127	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1473	F1	mg/Kg		147	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	157	S1+	70 - 130
o-Terphenyl	130		70 - 130

Lab Sample ID: 890-4531-A-1-D MSD
Matrix: Solid
Analysis Batch: 51456

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 51528

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	1285		mg/Kg		126	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	1416	F1	mg/Kg		142	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	150	S1+	70 - 130
o-Terphenyl	126		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-51747/1-A
Matrix: Solid
Analysis Batch: 51980

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/25/23 16:55	1

Lab Sample ID: LCS 880-51747/2-A
Matrix: Solid
Analysis Batch: 51980

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

Lab Sample ID: LCSD 880-51747/3-A
Matrix: Solid
Analysis Batch: 51980

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	251.5		mg/Kg		101	90 - 110	2	20

Lab Sample ID: 890-4532-2 MS
Matrix: Solid
Analysis Batch: 51980

Client Sample ID: FS28
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	506		1250	1754		mg/Kg		100	90 - 110		

Lab Sample ID: 890-4532-2 MSD
Matrix: Solid
Analysis Batch: 51980

Client Sample ID: FS28
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	506		1250	1715		mg/Kg		97	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

GC VOA

Prep Batch: 51473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4532-1	FS27	Total/NA	Solid	5035	
890-4532-2	FS28	Total/NA	Solid	5035	
890-4532-3	FS29	Total/NA	Solid	5035	
890-4532-4	SW05	Total/NA	Solid	5035	
MB 880-51473/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-51473/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-51473/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-27315-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-27315-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 51573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4532-1	FS27	Total/NA	Solid	8021B	51473
890-4532-2	FS28	Total/NA	Solid	8021B	51473
890-4532-3	FS29	Total/NA	Solid	8021B	51473
890-4532-4	SW05	Total/NA	Solid	8021B	51473
MB 880-51473/5-A	Method Blank	Total/NA	Solid	8021B	51473
LCS 880-51473/1-A	Lab Control Sample	Total/NA	Solid	8021B	51473
LCSD 880-51473/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	51473
880-27315-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	51473
880-27315-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	51473

Analysis Batch: 51714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4532-1	FS27	Total/NA	Solid	Total BTEX	
890-4532-2	FS28	Total/NA	Solid	Total BTEX	
890-4532-3	FS29	Total/NA	Solid	Total BTEX	
890-4532-4	SW05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 51456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4532-1	FS27	Total/NA	Solid	8015B NM	51528
890-4532-2	FS28	Total/NA	Solid	8015B NM	51528
890-4532-3	FS29	Total/NA	Solid	8015B NM	51528
890-4532-4	SW05	Total/NA	Solid	8015B NM	51528
MB 880-51528/1-A	Method Blank	Total/NA	Solid	8015B NM	51528
LCS 880-51528/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	51528
LCSD 880-51528/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	51528
890-4531-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	51528
890-4531-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	51528

Prep Batch: 51528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4532-1	FS27	Total/NA	Solid	8015NM Prep	
890-4532-2	FS28	Total/NA	Solid	8015NM Prep	
890-4532-3	FS29	Total/NA	Solid	8015NM Prep	
890-4532-4	SW05	Total/NA	Solid	8015NM Prep	
MB 880-51528/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-51528/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

GC Semi VOA (Continued)

Prep Batch: 51528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-51528/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4531-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4531-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 51585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4532-1	FS27	Total/NA	Solid	8015 NM	
890-4532-2	FS28	Total/NA	Solid	8015 NM	
890-4532-3	FS29	Total/NA	Solid	8015 NM	
890-4532-4	SW05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 51747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4532-1	FS27	Soluble	Solid	DI Leach	
890-4532-2	FS28	Soluble	Solid	DI Leach	
890-4532-3	FS29	Soluble	Solid	DI Leach	
890-4532-4	SW05	Soluble	Solid	DI Leach	
MB 880-51747/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-51747/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-51747/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4532-2 MS	FS28	Soluble	Solid	DI Leach	
890-4532-2 MSD	FS28	Soluble	Solid	DI Leach	

Analysis Batch: 51980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4532-1	FS27	Soluble	Solid	300.0	51747
890-4532-2	FS28	Soluble	Solid	300.0	51747
890-4532-3	FS29	Soluble	Solid	300.0	51747
890-4532-4	SW05	Soluble	Solid	300.0	51747
MB 880-51747/1-A	Method Blank	Soluble	Solid	300.0	51747
LCS 880-51747/2-A	Lab Control Sample	Soluble	Solid	300.0	51747
LCSD 880-51747/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	51747
890-4532-2 MS	FS28	Soluble	Solid	300.0	51747
890-4532-2 MSD	FS28	Soluble	Solid	300.0	51747

Lab Chronicle

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Client Sample ID: FS27
Date Collected: 04/17/23 13:50
Date Received: 04/17/23 16:36

Lab Sample ID: 890-4532-1
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	51473	04/19/23 12:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51573	04/20/23 18:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			51714	04/21/23 13:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			51585	04/20/23 09:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	51528	04/19/23 14:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51456	04/20/23 01:08	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	51747	04/21/23 14:52	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	51980	04/25/23 18:13	SMC	EET MID

Client Sample ID: FS28
Date Collected: 04/17/23 13:55
Date Received: 04/17/23 16:36

Lab Sample ID: 890-4532-2
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			5.03 g	5 mL	51473	04/19/23 12:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51573	04/20/23 19:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			51714	04/21/23 13:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			51585	04/20/23 09:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	51528	04/19/23 14:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51456	04/20/23 01:50	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	51747	04/21/23 14:52	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	51980	04/25/23 18:18	SMC	EET MID

Client Sample ID: FS29
Date Collected: 04/17/23 14:00
Date Received: 04/17/23 16:36

Lab Sample ID: 890-4532-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	51473	04/19/23 12:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51573	04/20/23 19:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			51714	04/21/23 13:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			51585	04/20/23 09:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	51528	04/19/23 14:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51456	04/20/23 06:35	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	51747	04/21/23 14:52	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	51980	04/25/23 18:32	SMC	EET MID

Client Sample ID: SW05
Date Collected: 04/17/23 14:15
Date Received: 04/17/23 16:36

Lab Sample ID: 890-4532-4
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			4.95 g	5 mL	51473	04/19/23 12:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51573	04/20/23 20:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			51714	04/21/23 13:10	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Client Sample ID: SW05

Date Collected: 04/17/23 14:15
Date Received: 04/17/23 16:36

Lab Sample ID: 890-4532-4

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			51585	04/20/23 09:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	51528	04/19/23 14:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51456	04/20/23 06:56	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	51747	04/21/23 14:52	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	51980	04/25/23 18:37	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Muy Wayno Recycle Facility

Job ID: 890-4532-1
SDG: 03C1558209

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4532-1	FS27	Solid	04/17/23 13:50	04/17/23 16:36	2.5
890-4532-2	FS28	Solid	04/17/23 13:55	04/17/23 16:36	2.5
890-4532-3	FS29	Solid	04/17/23 14:00	04/17/23 16:36	2.5
890-4532-4	SW05	Solid	04/17/23 14:15	04/17/23 16:36	0 - 2.5

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Tacoma Morrissey	Bill to: (if different)	Garret Green
Company Name:	Ensolum	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Green St.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-887-2946	Email:	Garret.Green@ExxonMobil.com

Work Order Comments

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

Project Name:	Muy Wayno Recycle Facility	Turn Around	
Project Number:	03C1558209	☑ Routine ☐ Rush	
Project Location:	32.148944, -103.921771	Due Date:	
Sampler's Name:	Kase Parker	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:	TW0007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.6	
Total Containers:		Corrected Temperature:	2.4	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021
FS27	S	4/17/2023	13:50	2.5'	Comp	1		x	x	x
FS28	S	4/17/2023	13:55	2.5'	Comp	1		x	x	x
FS29	S	4/17/2023	14:00	2.5'	Comp	1		x	x	x
SW05	S	4/17/2023	14:15	0-2.5'	Comp	1		x	x	x

ANALYSIS REQUEST — Parameters

890-4532 Chain of Custody

Preservative Codes

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

Sample Comments

Incident ID:
NVV2002451789
Cost Center:
AFE:
DD.2019.02518.CAP.CMP.01
DD.2017.03807.CAP.CMP.01,
tmorrissey@ensolum.com

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			4.17.23 1630			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4532-1
SDG Number: 03C1558209

Login Number: 4532
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4532-1
SDG Number: 03C1558209

Login Number: 4532
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 04/19/23 10:52 AM

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

ENSOLUM

APPENDIX C

NMOCD Notifications

From: Green, Garrett J
To: Tacoma Morrissey; Collins, Melanie
Subject: FW: [EXTERNAL] XTO - Sampling Notification (Week of 4/117/23 - 4/21/23)
Date: Friday, April 14, 2023 6:07:02 PM

[**EXTERNAL EMAIL**]

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Friday, April 14, 2023 9:39 AM
To: Green, Garrett J <garrett.green@exxonmobil.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 4/117/23 - 4/21/23)

External Email – Think Before You Click

Garrett,

Thank you for the notification. Please 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
JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Thursday, April 13, 2023 2:09 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>
Cc: Tacoma Morrissey <tmorrissey@ensolum.com>
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 4/117/23 - 4/21/23)

All,

XTO plans to complete final sampling activities at the sites listed below for the week of April 17, 2023.

Monday
- Muy Wanyo Recycle Facility/ NVV2002451789

Tuesday
- Muy Wanyo Recycle Facility/ NVV2002451789

Wednesday
- Muy Wayno 7 State 1H/ NMAP1829649787
- JRU 17 CTB/ nAPP2226628060

Thursday
- Muy Wayno 7 State 1H/ NMAP1829649787
- JRU 17 CTB/ nAPP2226628060

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

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 230665

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 230665
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	11/20/2023