



October 11, 2024

**New Mexico Oil Conservation Division**

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

**Re: Closure Request  
Corral Canyon 16-4 St Fed Com 126H  
Incident Number NAPP2335250734  
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document excavation and soil sampling activities performed at the Corral Canyon 16-4 St Fed Com 126H (Site). The purpose of excavation and soil sampling activities, conducted in accordance with an approved *Remediation Work Plan (RWP)*, was to address impacts to soil resulting from a release of produced water at the Site. XTO is submitting this *Closure Request*, describing excavation activities that have occurred and requesting no further remediation for Incident Number NAPP2335250734.

**SITE DESCRIPTION AND RELEASE BACKGROUND**

The Site is located in Unit O, Section 16, Township 25 South, Range 29 East, in Eddy County, New Mexico (32.12605°, -103.98646°) and is associated with oil and gas exploration and production operations on state land managed by the New Mexico State Land Office (NMSLO).

On December 8, 2023, a 2-inch Chiksan® joint in the flowback iron washed out during flowback operations, resulting in the release of 14.6 barrels (bbls) of produced water onto the surface of the well pad. A vacuum truck was dispatched to the Site to recover free standing fluids, and approximately 12.0 bbls of released fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email and submitted a Release Notification Form C-141 (Form C-141) on December 18, 2023. The release was assigned Incident Number NAPP2335250734.

Ensolum conducted Site assessment and delineation activities and presented the results in a *RWP* that was submitted on April 5, 2024, and approved by the NMOCD on April 15, 2024. The *RWP* proposed excavation of impacted and waste-containing soil identified during delineation activities. Delineation sample locations are shown on Figure 2 and laboratory analytical results can be found on Table 1. Complete laboratory analytical reports are included in the *RWP*.

In the *RWP* a variance to the Closure Criteria was requested and approved. The NMOCD response to the variance stated:

*Variance approved to use USGS groundwater data within .5 miles of site that is >25 years old. The site is at 3003 feet elevation and taking this into consideration the dtgw would still be >100 feet.*

XTO Energy, Inc  
Closure Request  
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As such, 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

## CULTURAL RESOURCE SURVEY

Since the release remained on pad the Site is exempt the Cultural Properties Protection Rule (CPP). No additional cultural resource surveys were completed in connection with this release.

## EXCAVATION SOIL SAMPLING ACTIVITIES

Ensolum personnel were onsite between September 26 and September 27, 2024, to excavate impacted soil according to the approved *RWP*. Excavation activities were performed by use of heavy equipment. To direct excavation activities, soil was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. XTO safety policy restricts soil disturbing activities to a 2-foot radius of any on-site production equipment and a 10-foot radius of any well heads. Once field screening indicated impacted soil was adequately removed to the maximum extent possible, 5-point composite soil samples were collected every 200 square feet from the floor and sidewall of the excavation extent. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation soil samples FS01 through FS27 were collected from the floor of the excavation at depths of 2 feet bgs. Confirmation soil samples SW01 through SW07 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 2 feet bgs. The confirmation soil sample locations were mapped utilizing a GPS unit and are depicted on Figure 3. Photographic documentation of the final excavation extent is provided in Appendix A.

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 Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following contaminants of concern (COCs): 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 Standards Method SM4500.

The final excavation extent measured approximately 5,252 square feet. A total of approximately 389 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and disposed of at the R360 Landfill Disposal Facility in Hobbs, New Mexico. The final excavation was fenced off pending backfilling.

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## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all excavation floor and sidewall samples indicated all COC concentrations were compliant with the Closure Criteria. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix B.

## CLOSURE REQUEST

Excavation activities were conducted at the Site as indicated in the *RWP* to address the December 2023 release of produced water. The approved *RWP* is included in Appendix C. Laboratory analytical results for all excavation soil samples collected indicate COC concentrations were compliant with the Closure Criteria. Based on the soil sample laboratory analytical results, no further remediation is required. The excavation will be backfilled with material purchased locally and the Site will be recontoured to match pre-existing site conditions.

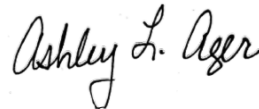
Excavation of soil has mitigated impacts exceeding the Closure Criteria at the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2335250734.

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

Sincerely,  
**Ensolum, LLC**



Tracy Hillard  
Project Engineer



Ashley L. Ager, M.S., P.G.  
Principal

cc: Colton Brown, XTO  
Kaylan Dirkx, XTO  
NMSLO

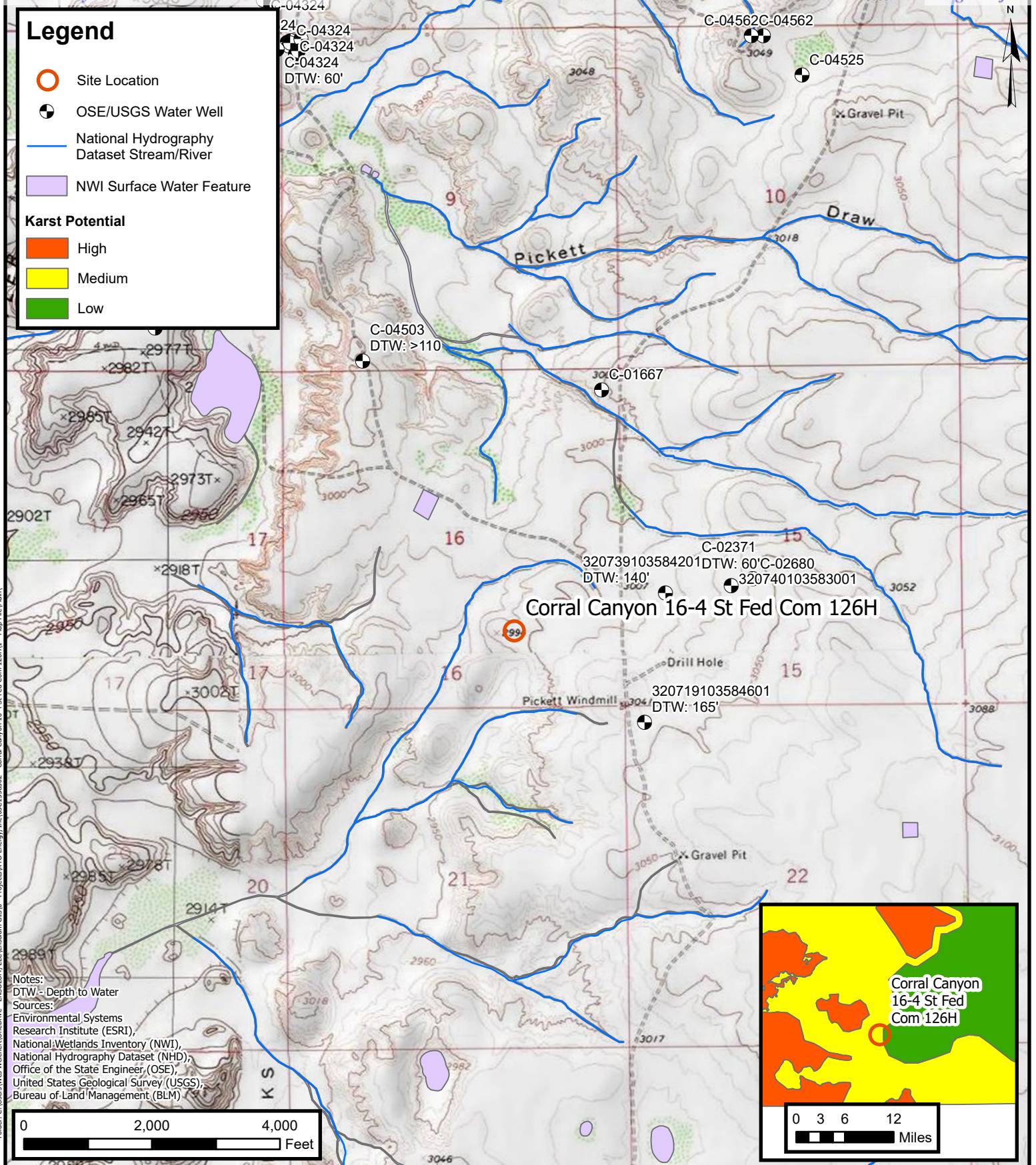
### Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Photographic Log
Appendix B	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix C	April 5, 2024 <i>Remediation Work Plan</i>



FIGURES








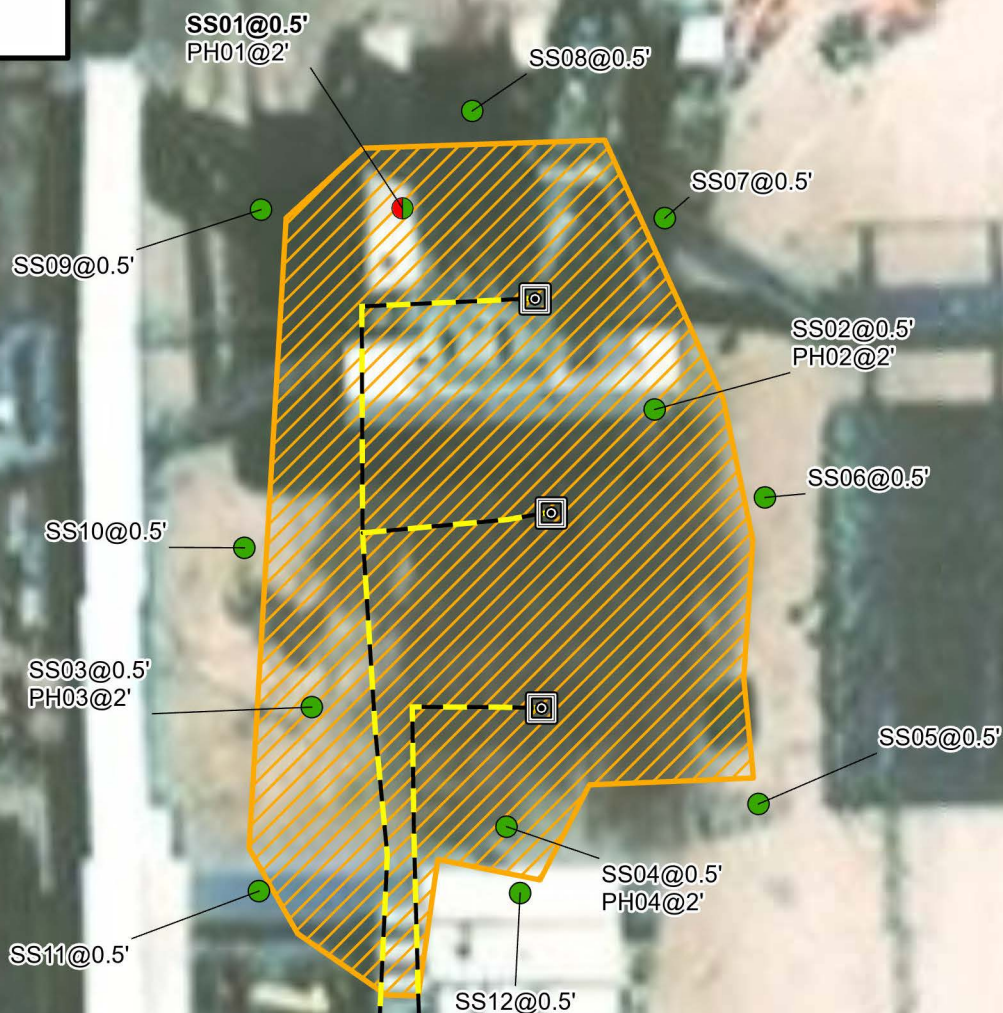
**Site Receptor Map**  
XTO Energy, Inc  
Corral Canyon 16-4 St Fed Com 126H  
Incident Number: NAPP2335250734  
Unit O, Sec 16, T25S, R29E  
Eddy Co, New Mexico, United States

**FIGURE**  
**1**

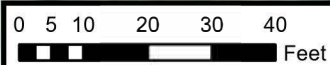


## Legend

- Delineation Soil Samples  
Compliant with Closure  
Criteria
- Delineation Soil Samples  
with Initial  
Concentrations  
Exceeding Closure  
Criteria
-  Wellhead Locations
-  Pipeline/Line/Utility
-  Release Extent



Notes:  
Sample ID @ Depth Below Ground Surface.  
Samples in bold indicate sample exceeded applicable  
Closure Criteria.



Sources: Environmental Systems Research Institute (ESRI)



## Delineation Soil Sample Locations

XTO Energy, Inc  
Corral Canyon 16-4 St Fed Com 126H  
Incident Number: NAPP2335250734  
Unit O, Sec 16, T25S, R29E  
Eddy Co, New Mexico, United States

FIGURE

2





## FIGURE 3



TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Corral Canyon 16-4 ST Fed Com 126H  
 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	20,000
Delineation Soil Samples										
SS01	01/19/2024	0.5	<0.00201	<0.00402	<49.7	1,390	115	1,390	1,510	20,700
PH01	01/29/2024	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	62.5
SS02	01/19/2024	0.5	<0.00199	<0.00398	<50.0	287	<50.0	287	287	4,230
PH02	01/29/2024	2	<0.00198	<0.00396	<50.1	<50.1	<50.1	<50.1	<50.1	199
SS03	01/19/2024	0.5	<0.00199	<0.00398	<49.6	133	<49.6	133	133	5,330
PH03	01/29/2024	2	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	413
SS04	01/19/2024	0.5	<0.00200	<0.00399	<49.6	65.2	<49.6	65.2	65.2	1,900
PH04	01/29/2024	2	<0.00202	<0.00403	<50.4	<50.4	<50.4	<50.4	<50.4	267
SS05	01/29/2024	0.5	<0.00199	<0.00398	<50.2	<50.2	<50.2	<50.2	<50.2	257
SS06	01/29/2024	0.5	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	271
SS07	01/29/2024	0.5	<0.00200	<0.00400	<50.0	51.0	<50.0	51.0	51.0	507
SS08	01/29/2024	0.5	<0.00199	<0.00398	<50.0	55.7	<50.0	55.7	55.7	204
SS09	01/29/2024	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	445
SS10	01/29/2024	0.5	<0.00202	<0.00404	<49.6	<49.6	<49.6	<49.6	<49.6	413
SS11	01/29/2024	0.5	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	<50.1	321
SS12	01/29/2024	0.5	<0.00198	<0.00396	<50.4	<50.4	<50.4	<50.4	<50.4	430
Excavation Soil Samples										
FS01	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
FS02	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
FS03	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS04	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS05	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS06	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS07	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
FS08	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS09	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS10	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS11	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS12	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
FS13	09/27/2024	2	<0.050	<0.300	<10.0	42.1	<10.0	42.1	42.1	240
FS14	09/27/2024	2	<0.050	<0.300	<10.0	105	<10.0	105	105	320



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**Corral Canyon 16-4 ST Fed Com 126H**  
**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)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
FS15	09/27/2024	2	<0.050	<0.300	<10.0	122	16.6	122	139	240
FS16	09/27/2024	2	<0.050	<0.300	<10.0	110	10.7	110	121	336
FS17	09/27/2024	2	<0.050	<0.300	<10.0	106	<10.0	106	106	288
FS18	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS19	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
FS20	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS21	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	384
FS22	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS23	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336
FS24	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS25	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	304
FS26	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS27	09/27/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
SW01	09/27/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
SW02	09/27/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
SW03	09/27/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW04	09/27/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
SW05	09/27/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,040
SW06	09/27/2024	0-2	<0.050	<0.300	<10.0	135	15.5	135	150.5	480
SW07	09/27/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288

## 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



## APPENDIX A

### Photographic Log

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# Photographic Log

XTO Energy, Inc.

Corral Canyon 16-4 St Fed Com 126H

Incident Number nAPP2335250734



Photograph: 1 Date: 9/27/2024  
Description: Final excavation extent  
View: South



Photograph: 2 Date: 9/27/2024  
Description: Final excavation extent  
View: Southeast



Photograph: 3 Date: 9/27/2024  
Description: Final excavation extent  
View: East



Photograph: 4 Date: 9/27/2024  
Description: Final excavation extent  
View: Southwest





## APPENDIX B

### Laboratory Analytical Reports & Chain of Custody Documentation

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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October 02, 2024

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: CORRAL CANYON 16-4 ST FED COM 126H

Enclosed are the results of analyses for samples received by the laboratory on 10/01/24 13:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received:	10/01/2024	Sampling Date:	09/27/2024
Reported:	10/02/2024	Sampling Type:	Soil
Project Name:	CORRAL CANYON 16-4 ST FED COM 126	Sampling Condition:	Cool & Intact
Project Number:	03C1558302	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.12605, -103.98646		

**Sample ID: FS 01 2' (H245946-01)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17	
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478	
Total BTEX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/02/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 02 2' (H245946-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 03 2' (H245946-03)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 04 2' (H245946-04)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 05 2' (H245946-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEX	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 06 2' (H245946-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 07 2' (H245946-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 08 2' (H245946-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 09 2' (H245946-09)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEX	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 76.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 10 2' (H245946-10)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 11 2' (H245946-11)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 12 2' (H245946-12)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 13 2' (H245946-13)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	42.1	10.0	10/02/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 14 2' (H245946-14)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	105	10.0	10/01/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 15 2' (H245946-15)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEX	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	122	10.0	10/01/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	16.6	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 16 2' (H245946-16)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	110	10.0	10/01/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	10.7	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 17 2' (H245946-17)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	106	10.0	10/01/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 91.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 18 2' (H245946-18)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	10/02/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 19 2' (H245946-19)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 83.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 20 2' (H245946-20)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEX	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/02/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 21 2' (H245946-21)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/02/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 22 2' (H245946-22)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/02/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 79.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 23 2' (H245946-23)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/02/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 24 2' (H245946-24)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/02/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 94.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 25 2' (H245946-25)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEX	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/02/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 96.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 26 2' (H245946-26)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/02/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 96.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 27 2' (H245946-27)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	1.93	96.6	2.00	3.65		
Toluene*	<0.050	0.050	10/01/2024	ND	2.00	100	2.00	3.66		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	3.22		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.04	101	6.00	3.09		
Total BTEx	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2024	ND	190	94.8	200	0.0116	
DRO >C10-C28*	<10.0	10.0	10/02/2024	ND	186	93.0	200	0.981	
EXT DRO >C28-C36	<10.0	10.0	10/02/2024	ND					

Surrogate: 1-Chlorooctane 84.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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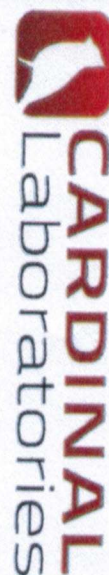
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager





101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> Ensolum, LLC				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																	
<b>Project Manager:</b> Tracy Hillard				<b>P.O. #:</b>																					
<b>Address:</b> 3122 National Parks Hwy				<b>Company:</b> XTO Energy Inc.																					
<b>City:</b> Carlsbad				<b>Attn:</b> Amy Ruth																					
<b>State:</b> NM <b>Zip:</b> 88220				<b>Address:</b> 3104 E Green St																					
<b>Phone #:</b> 575 937 3906 <b>Fax #:</b>				<b>City:</b> Carlsbad																					
<b>Project #:</b> 63CIC558 502 <b>Project Owner:</b> XTO				<b>State:</b> NM <b>Zip:</b> 88220																					
<b>Project Name:</b> Corral Canyon 16-4 St Fed Com 126H				<b>Phone #:</b>																					
<b>Project Location:</b> 32.12605, -103.98616				<b>Fax #:</b>																					
<b>Sample Name:</b> Joshua Boyley																									
<b>FOR LAB USE ONLY</b>																									
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	Chlorides	TPH	BTEX								
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :												
H459410	FS01	2	C	1	X									9-27-24	0630	X	X	X							
	FS02														0635										
	FS03														0640										
	FS04														0900										
	FS05														0905										
	FS06														0910										
	FS07														0930										
	FS08														0935										
	FS09														0940										
	FS10	2	C	1	X									9-27-24	0945	X	X	X							

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<b>Relinquished By:</b> [Signature]		<b>Date:</b> 10-1-24		<b>Received By:</b> [Signature]		<b>Date:</b> 10-1-24	
<b>Relinquished By:</b>		<b>Date:</b>		<b>Received By:</b>		<b>Date:</b>	
<b>Time:</b> 1330							
<b>Time:</b>							

**Delivered By:** (Circle One)  
**Sampler - UPS - Bus - Other:**

**Observed Temp. °C:** 1.3  
**Corrected Temp. °C:** 0.7

**Sample Condition:**  
Cool Intact ☒ Yes ☐ No  
Bacteria (only) Sample Condition ☒ Standard ☐ Rush

**Turnaround Time:** 72 hr  
**Thermometer ID #:** 140  
**Corrected Factor:** 0.6°C

**Checked BY:** [Signature]  
**REMARKS:** APP 2335250734  
Incident: Cost Center:

**Verbal Result:** ☐ Yes ☐ No **Add'l Phone #:**  
All Results are emailed. Please provide Email address:  
THillard @ensolum.com, TMorrissey@ensolum.com, kthomason@ensolum.com



Ensolium, LLC

ANALYSIS REQUEST

2 of 3

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> Ensolum, LLC						<b>BILL TO</b>						<b>ANALYSIS REQUEST</b>											
<b>Project Manager:</b> Tracy Hillard						<b>P.O. #:</b>																	
<b>Address:</b> 3122 National Parks Hwy						<b>Company:</b> XTO Energy Inc.																	
<b>City:</b> Carlsbad						<b>Attn:</b> Amy Ruth																	
<b>Phone #:</b> 575 937 3906						<b>State:</b> NM <b>Zip:</b> 88220																	
<b>Fax #:</b>						<b>Address:</b> 3104 E Green St																	
<b>Project #:</b> 83C4558 302						<b>City:</b> Carlsbad																	
<b>Project Name:</b> Corral Canyon 16-4 St Rd Con 126H						<b>State:</b> NM <b>Zip:</b> 88220																	
<b>Project Location:</b> 32.12605 -103.98646						<b>Phone #:</b>																	
<b>Sample Name:</b> Joshua Boyley						<b>Fax #:</b>																	
<small>FOR LAB USE ONLY</small>																							
Lab I.D.		Sample I.D.		Depth (feet)		(G)RAB OR (C)OMP. # CONTAINERS		MATRIX				PRESERV.		SAMPLING									
HB45946				2		1		X				DATE		TIME		Chlorides							
11		FS 11										9-27-24		0850		TPH							
13		FS 12												0955		BTX							
13		FS 13												1020									
14		FS 14												1105									
15		FS 15												1110									
16		FS 16												1115									
17		FS 17												1120									
18		FS 18												1320									
19		FS 19												1325									
20		FS 20		2		1		Y				9-27-24		1330		X Y X							

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<b>Relinquished By:</b> [Signature]				<b>Received By:</b> [Signature]			
<b>Date:</b> 9/24				<b>Date:</b> 9/24			
<b>Time:</b> 1330				<b>Time:</b> 1330			
<b>Date:</b>				<b>Date:</b>			
<b>Time:</b>				<b>Time:</b>			

**Delivered By:** (Circle One)  
**Sampler - UPS - Bus - Other:**

**Observed Temp. °C:** 9.3°C    **Corrected Temp. °C:** 0.7°C

**Sample Condition:** Cool Intact ☒ Yes ☐ No

**CHECKED BY:** [Signature] (Initials)

**Turnaround Time:** 24 hr    **Standard** ☐ **Rush** ☒

**Thermometer ID #:** 140    **Corrosion Factor:** 0.5°C = 0.2°C

**Bacteria (only) Sample Condition:** Cool Intact ☐ Yes ☐ No

**Remarks:** APP 233525 0134 Incident: APP 233525 0134 Cost Center:

**All Results are emailed. Please provide Email address:** THillard@ensolum.com, TMorrissey@ensolum.com, kthomason@ensolum.com

**Verbal Result:** ☐ Yes ☐ No **Add'l Phone #:**





W  
g  
W

Page 32 of 32



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 02, 2024

TRACY HILLARD

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: CORRAL CANYON 16-4 ST FED COM 126H

Enclosed are the results of analyses for samples received by the laboratory on 10/01/24 13:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received:	10/01/2024	Sampling Date:	09/27/2024
Reported:	10/02/2024	Sampling Type:	Soil
Project Name:	CORRAL CANYON 16-4 ST FED COM 126	Sampling Condition:	Cool & Intact
Project Number:	03C1558302	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.12605, -103.98646		

**Sample ID: SW 01 0-2 (H245945-01)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17	
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478	
Total BTX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	10/02/2024	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SW 02 0-2 (H245945-02)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17	
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478	
Total BTX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/02/2024	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SW 03 0-2 (H245945-03)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17	
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478	
Total BTX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/02/2024	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SW 04 0-2 (H245945-04)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17	
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478	
Total BTX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	10/02/2024	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SW 05 0-2 (H245945-05)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17		
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168		
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462		
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478		
Total BTX	<0.300	0.300	10/01/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3040	16.0	10/02/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SW 06 0-2 (H245945-06)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17	
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478	
Total BTEx	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	10/02/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	135	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	15.5	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM  
TRACY HILLARD  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 10/01/2024  
Reported: 10/02/2024  
Project Name: CORRAL CANYON 16-4 ST FED COM 126  
Project Number: 03C1558302  
Project Location: XTO 32.12605, -103.98646

Sampling Date: 09/27/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SW 07 0-2 (H245945-07)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	2.13	107	2.00	1.17	
Toluene*	<0.050	0.050	10/01/2024	ND	2.07	104	2.00	0.168	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.13	106	2.00	0.462	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.35	106	6.00	0.478	
Total BTEX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	10/02/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	178	88.9	200	3.40	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	168	83.9	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07      The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND      Analyte NOT DETECTED at or above the reporting limit
- RPD      Relative Percent Difference
- \*\*      Samples not received at proper temperature of 6°C or below.
- \*\*\*      Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "C. D. Keene".

Celey D. Keene, Lab Director/Quality Manager





101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH	BTEX
164575	SW01	0-2	C	1			X							9-27-24	1130	X	X	X
2	SW02	2-3													1140			
3	SW03	3-4													1315			
4	SW04	4-5													1410			
5	SW05	5-6													1415			
6	SW06	6-7													1145			
7	SW07	7-8	C	1			X							9-27-24	1150	X	X	X

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Page 10 of 10



Appendix C  
April 5, 2024 *Remediation Work Plan*





April 5, 2024

**New Mexico Oil Conservation Division**

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

**Re: Remediation Work Plan  
Corral Canyon 16-4 St Fed Com 126H  
Incident Number NAPP2335250734  
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 (Work Plan)* to document site assessment and delineation activities completed to date and proposes remedial actions to address impacted and waste-containing soil identified at the Corral Canyon 16-4 St Fed Com 126H (Site). The purpose of the Site assessment and delineation activities was to determine the presence or absence of impacted soil resulting from a release of produced water at the Site. The following *Work Plan* proposes to excavate impacted and waste-containing soil and requests a Closure Criteria variance.

## **SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit O, Section 16, Township 25 South, Range 29 East, in Eddy County, New Mexico (32.12605°, -103.98646°) and is associated with oil and gas exploration and production operations on State Trust Land (STL) managed by the New Mexico State Land Office (NMSLO).

On December 8, 2023, a 2-inch Chiksan® joint in the flowback iron washed out during flowback operations, resulting in the release of 14.6 barrels (bbls) of produced water onto the surface of the well pad. A vacuum truck was dispatched to the Site to recover free standing fluids, and approximately 12.0 bbls of released fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email and submitted a Release Notification Form C-141 (Form C-141) on December 18, 2023. The release was assigned Incident Number NAPP2335250734.

Since the release remained on pad and inside the lined containment area, the Site is exempt from the Cultural Properties Protection Rule (CPP). As such no additional cultural resource surveys were completed in connection with this release.

## **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 below.

XTO Energy, Inc.  
Remediation Work Plan  
Corral Canyon 16-4 St Fed Com 126H

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 320739103584201, located approximately 0.46 miles northeast of the Site. The groundwater well's most recently reported depth to groundwater measurement was collected on January 29, 1998, at 140 feet bgs. The total depth of the well is 192 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendices A.

The closest continuously flowing or significant watercourse to the Site is a seasonal dry wash, located approximately 760 feet west of the Site. The Site is greater than 200 feet from any 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). 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) 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

The NMOCD prefers the nearest depth to groundwater measurement used to determine Closure Criteria be less than 25 years old and within ½ mile of the Site. The USGS water well data is within ½ mile, but 26 years old. Based on the lack of sensitive receptors at the Site, the Site not being underlain by unstable geology, and nearby depth to groundwater data estimating regional depth to groundwater to be greater than 100 feet bgs in multiple directions of the Site, XTO is requesting a variance for the preferred age of the nearest depth to groundwater data guideline. The nearest depth to groundwater data includes:

- The above-mentioned groundwater well USGS 320739103584201 with a recorded depth to groundwater of 140 feet bgs on January 29, 1998, and located 0.46 miles northeast of the Site;
- Groundwater well USGS 320719103584601 with a recorded depth to groundwater of 165 feet bgs, last recorded January, 1977. Located 0.47 miles southeast of the Site;
- Soil boring C-04503, permitted by New Mexico Office of the State Engineer (NMOSE) and located 0.91 miles northwest of the Site, was a soil boring completed to determine depth to water on April 19, 2021. The soil boring was drilled via hollow-stem auger and advanced to a depth of 110 feet bgs. No groundwater was encountered during the drilling and the borehole was dry; and
- NMOSE monitoring well C-2371 located 0.72 miles east of the Site with a recorded depth to groundwater of 60 feet bgs, last measured in January 1995. The total depth of the well was 200

XTO Energy, Inc.  
Remediation Work Plan  
Corral Canyon 16-4 St Fed Com 126H

feet bgs and groundwater was first encountered at 162 feet bgs, indicating the presence of a confined aquifer. The actual depth to groundwater is 162 feet.

While both USGS water wells are older than the NMOCD preferred age for reference data, historical data from the wells demonstrate depth to groundwater was consistently  $\pm 1$ -foot bgs over a 15-year period for well 320739103584201 and  $\pm 5$  feet bgs over a 19-year period for well 320719103584601. Additionally, well 320739103584201 only exceeds the NMOCD recommended age of depth to groundwater data by 15 months. The next nearest data is from well C-2371, and although the most recent depth to groundwater measurement was recorded as 60 feet bgs, the aquifer appears to be confined based on the well record and log stating the water bearing zone occurred between 162 feet to 200 feet bgs. Lastly, soil boring C-4503, located 0.91 miles northwest of the Site, was dry to 110 feet bgs in April 2021. The regional depth to groundwater data mentioned above is historically and laterally consistent and, therefore, equally protective of the public, the environment, and groundwater as compared to the preferred guideline for age (less than 25 years) and range ( $\frac{1}{2}$  mile) of referenced water well data. Ensolum believes the data listed above can reasonably and accurately be used to estimate depth to groundwater at the Site to be greater than 100 feet bgs. Based on the above-mentioned findings, XTO requests NMOCD consider a variance for use of water well data that is greater than 25 years old for estimating of depth to groundwater. All Well Logs used for the depth to groundwater investigation are included in Appendix A.

## SITE ASSESSMENT ACTIVITIES

On January 19, 2024, Ensolum personnel conducted a Site assessment to evaluate the release extent based on information provided on Form C-141, information provided by XTO, and visual observations. Four delineation soil samples (SS01 through SS04) were collected at a depth of 0.5 feet bgs to investigate the release extent area. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent area was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 2. A Photographic Log of the release extent and Site conditions is included in Appendix B.

The delineation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following constituents of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil samples delivered to the laboratory the same day they are collected may not have equilibrated to the 6 degrees Celsius required for shipment and long term storage but are considered by the laboratory to have been received in acceptable condition.

Based on laboratory analytical results from delineation soil samples SS01 through SS04, impacted and waste-containing soil was identified within the release extent area. Therefore, additional delineation activities are warranted.

## DELINEATION SOIL SAMPLING ACTIVITIES

On January 29, 2024, Ensolum returned to the Site to oversee subsurface delineation activities. Four potholes (PH01 through PH04) were advanced to 2 feet bgs by a backhoe to investigate the vertical extent of the release. Potholes PH01 through PH04 were advanced in the vicinity of the locations of soil

XTO Energy, Inc.  
Remediation Work Plan  
Corral Canyon 16-4 St Fed Com 126H

samples SS01 through SS04, respectively. Discrete delineation soil samples were collected from the terminal depth of each pothole at 2 feet bgs. Eight discrete soil samples (SS05 through SS12) were collected outside the release extent at a depth of 0.5 feet bgs to define the lateral extent of the release. All delineation soil samples were field screened, handled, and submitted to Eurofins for analysis of the same COCs as described above. The delineation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 2. A photographic log of delineation activities is included in Appendix B. Field screening results and observations for all potholes were logged on lithologic/soil sampling logs, which are included in Appendix C.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for delineation soil sample SS01, collected at 0.5 feet bgs, indicated TPH-GRO/TPH-DRO and chloride concentrations exceeded the Closure Criteria. This was the only delineation soil sample containing COC concentrations exceeding Closure Criteria. However, chloride concentrations in soil samples SS01 through SS04 and TPH concentrations in soil samples SS01, SS02, and SS03 contained COC concentrations exceeding the reclamation requirement. Laboratory analytical results for all other delineation soil samples collected indicated COC concentrations were in compliance with the Closure Criteria and the reclamation requirement. This includes PH01 through PH04, collected at 2 feet bgs, which defines the release vertically, and SS05 through SS12, which defines the release laterally. Laboratory analytical results for all delineation soil samples indicated no benzene or BTEX concentrations were detected in any samples. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included in Appendix D.

## PROPOSED REMEDIATION WORK PLAN

Site assessment and delineation activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from a release of produced water. Based on laboratory analytical results, impacted and waste-containing soil exists across an approximate 7,828 square-foot area within the release footprint at depths ranging from the pad surface to approximately 1-foot bgs. Vertical definition to the Closure Criteria and reclamation requirement was achieved in all potholes. The lateral extent of the release is defined through laboratory analytical results of soil samples SS05 through SS12.

XTO proposes to remove impacted and waste-containing soil identified at the Site. The proposed excavation extent is depicted on Figure 3. Following the removal of impacted soil, confirmation samples will be collected at a sampling frequency of every 200 square feet along the floor and sidewalls of the final excavation extent. Based on delineation soil sample laboratory analytical results, Ensolum anticipates the excavation to extend to a depth of approximately 1.5 feet bgs. The soil samples will be handled and analyzed for the same COCs as described above.

An estimated 450 cubic yards of soil will be removed. The excavated soil will be transferred to a permitted landfill facility for disposal. The excavation will be backfilled and recontoured to match pre-existing Site conditions. Due to an XTO health and safety policy regarding mechanical excavation near active wellheads, a 10-foot buffer will be applied around each wellhead. Confirmation sidewall samples will be collected around the active wellheads.

XTO believes this *Work Plan* is protective of human health, the environment, and groundwater. As such, XTO requests approval of this *Work Plan* and variance by NMOCD. XTO will complete the excavation and soil sampling activities within 90 days of the date of approval of this *Work Plan* by the NMOCD or within 90 days of when XTO operations are discharged from the Site, whichever comes first. If you have



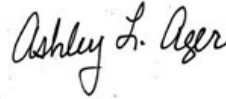
XTO Energy, Inc.  
Remediation Work Plan  
Corral Canyon 16-4 St Fed Com 126H

any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or [tmorrissey@ensolum.com](mailto:tmorrissey@ensolum.com).

Sincerely,  
**Ensolum, LLC**



Benjamin J. Belill  
Senior Geologist



Ashley Ager, P.G., M.S.  
Principal

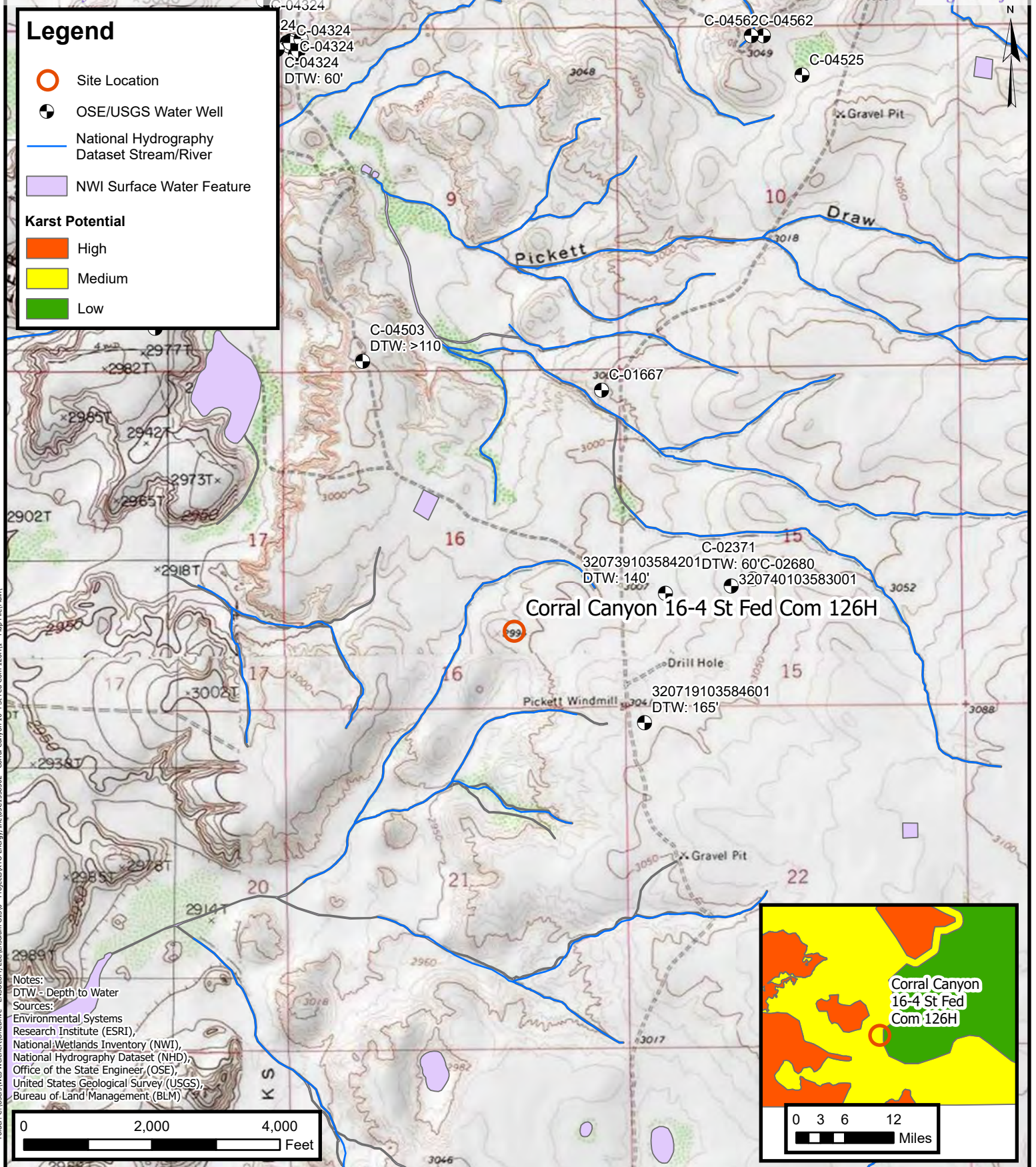
cc: Amy Ruth, XTO  
Amanda Garcia, XTO  
NMSLO

Appendices:

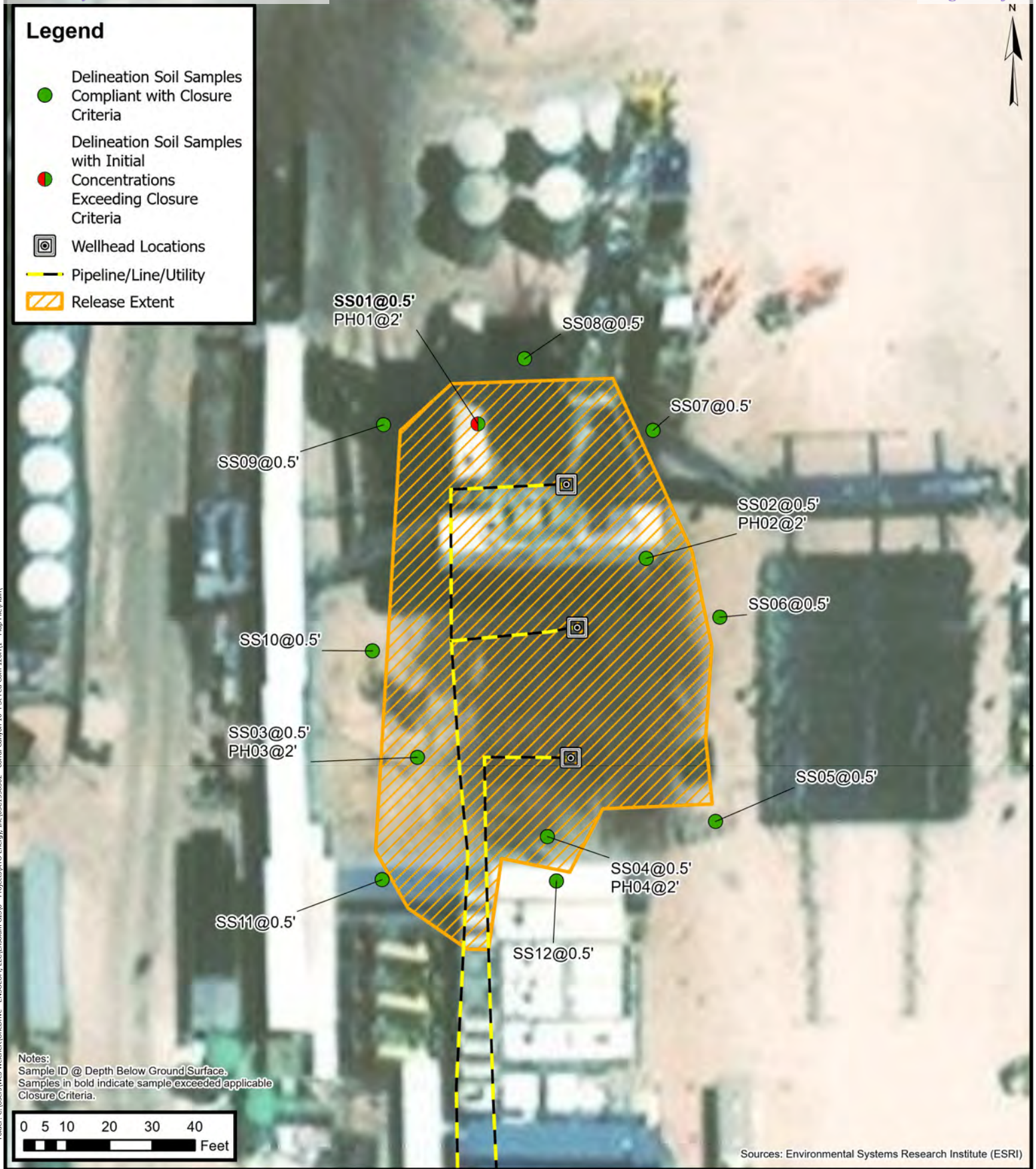
Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Proposed Excavation Extent
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Lithologic / Soil Sampling Logs
Appendix D	Laboratory Analytical Reports & Chain-of-Custody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



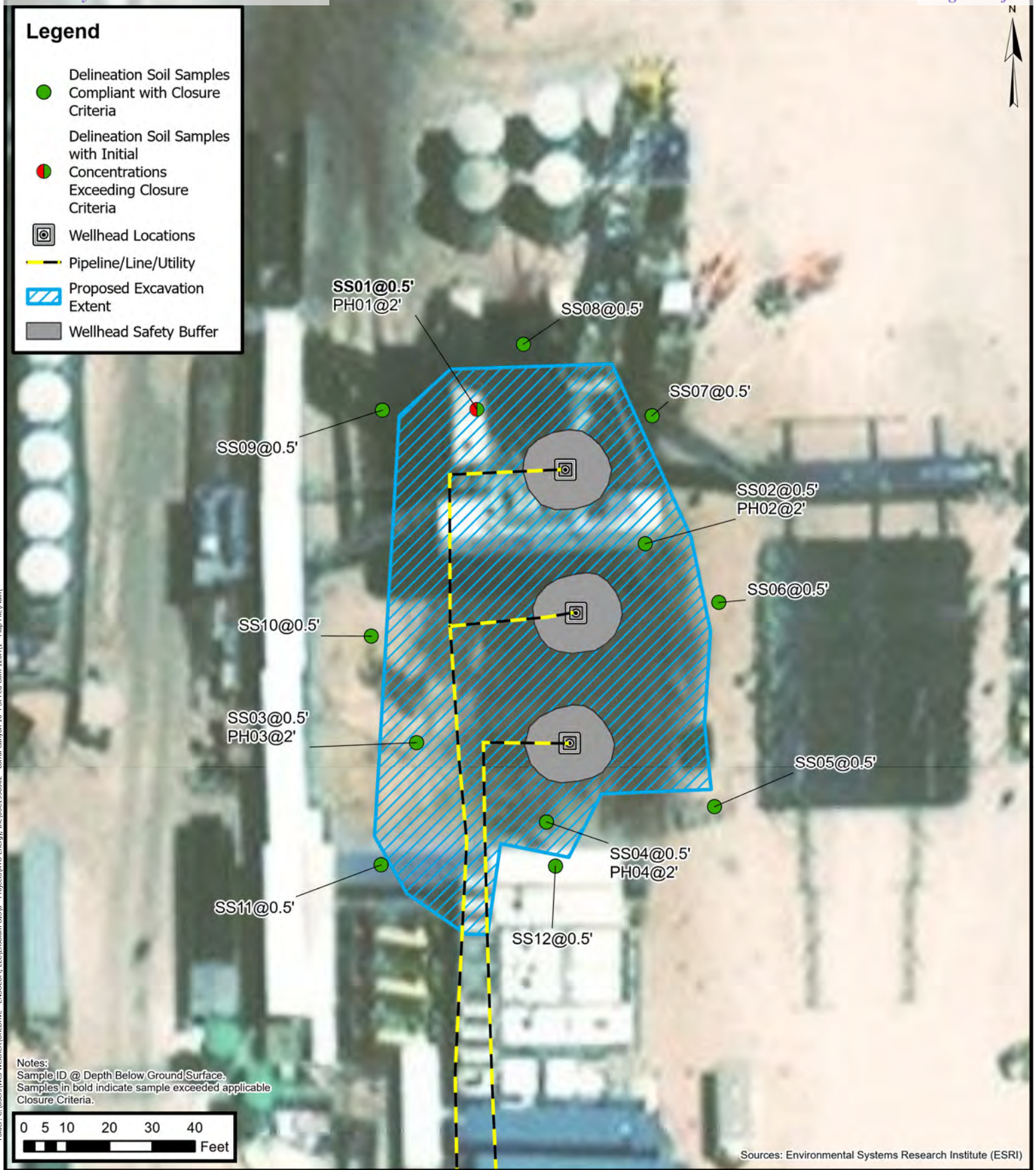
FIGURES











## Proposed Excavation Extent

XTO Energy, Inc  
Corral Canyon 16-4 St Fed Com 126H  
Incident Number: NAPP2335250734  
Unit O, Sec 16, T25S, R29E  
Eddy Co, New Mexico, United States

FIGURE

3



TABLES





**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**Corral Canyon 16-4 ST Fed Com 126H**  
**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	20,000
Delineation Soil Samples										
SS01	01/19/2024	0.5	<0.00201	<0.00402	<49.7	1,390	115	<b>1,390</b>	1,510	<b>20,700</b>
PH01	01/29/2024	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	62.5
SS02	01/19/2024	0.5	<0.00199	<0.00398	<50.0	287	<50.0	287	287	4,230
PH02	01/29/2024	2	<0.00198	<0.00396	<50.1	<50.1	<50.1	<50.1	<50.1	199
SS03	01/19/2024	0.5	<0.00199	<0.00398	<49.6	133	<49.6	133	133	5,330
PH03	01/29/2024	2	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	413
SS04	01/19/2024	0.5	<0.00200	<0.00399	<49.6	65.2	<49.6	65.2	65.2	1,900
PH04	01/29/2024	2	<0.00202	<0.00403	<50.4	<50.4	<50.4	<50.4	<50.4	267
SS05	01/29/2024	0.5	<0.00199	<0.00398	<50.2	<50.2	<50.2	<50.2	<50.2	257
SS06	01/29/2024	0.5	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	271
SS07	01/29/2024	0.5	<0.00200	<0.00400	<50.0	51.0	<50.0	51.0	51.0	507
SS08	01/29/2024	0.5	<0.00199	<0.00398	<50.0	55.7	<50.0	55.7	55.7	204
SS09	01/29/2024	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	445
SS10	01/29/2024	0.5	<0.00202	<0.00404	<49.6	<49.6	<49.6	<49.6	<49.6	413
SS11	01/29/2024	0.5	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	<50.1	321
SS12	01/29/2024	0.5	<0.00198	<0.00396	<50.4	<50.4	<50.4	<50.4	<50.4	430

## 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



## APPENDIX A

### Referenced Well Records

---



USGS Home  
Contact USGS  
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:


Groundwater

Geographic Area:

United States

GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 320739103584201

Minimum number of levels = 1  
[Save file of selected sites](#) to local disk for future upload

USGS 320739103584201 25S.29E.15.31134

Eddy County, New Mexico  
Latitude 32°07'39", Longitude 103°58'42" NAD27  
Land-surface elevation 3,017 feet above NAVD88  
The depth of the well is 192 feet below land surface.  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1983-02-01			D 62610		2875.02	NGVD29	1		Z	
1983-02-01			D 62611		2876.60	NAVD88	1		Z	
1983-02-01			D 72019	140.40			1		Z	
1987-10-20			D 62610		2875.09	NGVD29	1		Z	
1987-10-20			D 62611		2876.67	NAVD88	1		Z	
1987-10-20			D 72019	140.33			1		Z	
1992-11-06			D 62610		2874.61	NGVD29	1		S	
1992-11-06			D 62611		2876.19	NAVD88	1		S	
1992-11-06			D 72019	140.81			1		S	
1998-01-29			D 62610		2874.52	NGVD29	1		S	
1998-01-29			D 62611		2876.10	NAVD88	1		S	
1998-01-29			D 72019	140.90			1		S	

Explanation

Section	Code	Description
---------	------	-------------

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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



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0.29 0.25 nadww01



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Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 320719103584601

Minimum number of levels = 1  
[Save file of selected sites](#) to local disk for future upload

USGS 320719103584601 25S.29E.16.44444

Eddy County, New Mexico  
Latitude 32°07'19", Longitude 103°58'46" NAD27  
Land-surface elevation 3,042 feet above NAVD88  
The depth of the well is 200 feet below land surface.  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>



Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1958-08-19			D	62610	2870.28	NGVD29	1	Z			A
1958-08-19			D	62611	2871.86	NAVD88	1	Z			A
1958-08-19			D	72019	170.14		1	Z			A
1958-10-23			D	62610	2869.62	NGVD29	1	Z			A
1958-10-23			D	62611	2871.20	NAVD88	1	Z			A
1958-10-23			D	72019	170.80		1	Z			A
1975-12-09			D	62610	2875.47	NGVD29	1	S			A
1975-12-09			D	62611	2877.05	NAVD88	1	S			A
1975-12-09			D	72019	164.95		1	S			A
1976-01-16			D	62610	2873.30	NGVD29	1	S			A
1976-01-16			D	62611	2874.88	NAVD88	1	S			A
1976-01-16			D	72019	167.12		1	S			A
1977-01-14			D	62610	2875.37	NGVD29	1	S			A
1977-01-14			D	62611	2876.95	NAVD88	1	S			A
1977-01-14			D	72019	165.05		1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined

Section	Code	Description
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Page Last Modified: 2024-04-04 15:11:18 EDT

0.28   0.25 nadww02



Revised June 1972

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Johnny Reid  
Street or Post Office Address 245 E. London Rd.  
City and State Loving, N.M. 88256

465299  
TM 194253  
95 MAR 16 AM 11 10  
Owner's Well No. 2  
STATE ENGINEER OFFICE  
SANTA FE NEW MEXICO

Well was drilled under Permit No. C-2371 and is located in the:

a. NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  of Section 15 Township 25S Range 29E N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Eddy County.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Campbell Drilling License No. WD-1259

Address 10 W. Blevins Rd. Artesia, N.M. 88210

Drilling Began 1-12-95 Completed 1-24-95 Type tools cable Size of hole 10 1/2 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 200 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
162	200	638	Conglomerated rock or sand	20 GPM +

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
7	23		1 1/2	200		collar	140	200

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
			none		

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received 02-01-95 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. C-2371 Use Stock Location No. 25.29.15.32131

Section 7. REMARKS AND ADDITIONAL INFORMATION

STATE ENGINEER OFFICE  
ROSWELL-NEW MEXICO  
95 FEB 1 AM 11 45

*Mike Campbell*  
Driller

Released to Imaging: 10/22/2024 3:58:50 PM



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)


1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4503			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 8	SECONDS 15.74	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE 103	59	38.34	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SWSW S9 T25S R29E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 04/19/2021	DRILLING ENDED 04/19/2021	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 110	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		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)
	FROM	TO						
	0	110	±6.5	Boring- HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

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

FILE NO.	C-4503	POD NO.	1	TRN NO.	682792
LOCATION	Expl	25S.29E.9.334	WELL TAG ID NO.		PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		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)
	FROM	TO				
	0	4	4	Caliche, tan, off-white, dry, tan sand m-f grained, well sorted, trace silt	Y ✓ N	
	4	41	37	Sand, tan, m-f, well sorted, little caliche gravel, tan, trace silt, low consolidation	Y ✓ N	
	41	--	--	Sandy clay, brown, non plastic, non cohesive, no odor, no stain, m-f grained, well	Y ✓ N	
	43	46	5	increase in clay content, low plasticity Claystone, brown, light brown mottling,	Y ✓ N	
	46	110	64	Claystone, brown, light brown mottling, cohesive, medium plasticity	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						
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: Corral Canyon 212H. Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge					
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:  <div style="display: flex; justify-content: space-between;"> <div>             Jackie D. Atkins         </div> <div>05/05/2021</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div> <div>DATE</div> </div>					

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/30/2017)

FILE NO. <b>C-4503</b>	POD NO. <b>1</b>	TRN NO. <b>682792</b>
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



## APPENDIX B

### Photographic Log

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**Photographic Log**

XTO Energy, Inc.

Corral Canyon 16-4 St Fed Com 126H

Incident Number nAPP2335250734



Photograph: 1 Date: 1/19/2024  
Description: Site assessment, release extent area.  
View: Northeast



Photograph: 2 Date: 1/19/2024  
Description: Site assessment, release extent area.  
View: South



Photograph: 3 Date: 1/29/2024  
Description: Delineation activities, PH01.  
View: Southeast




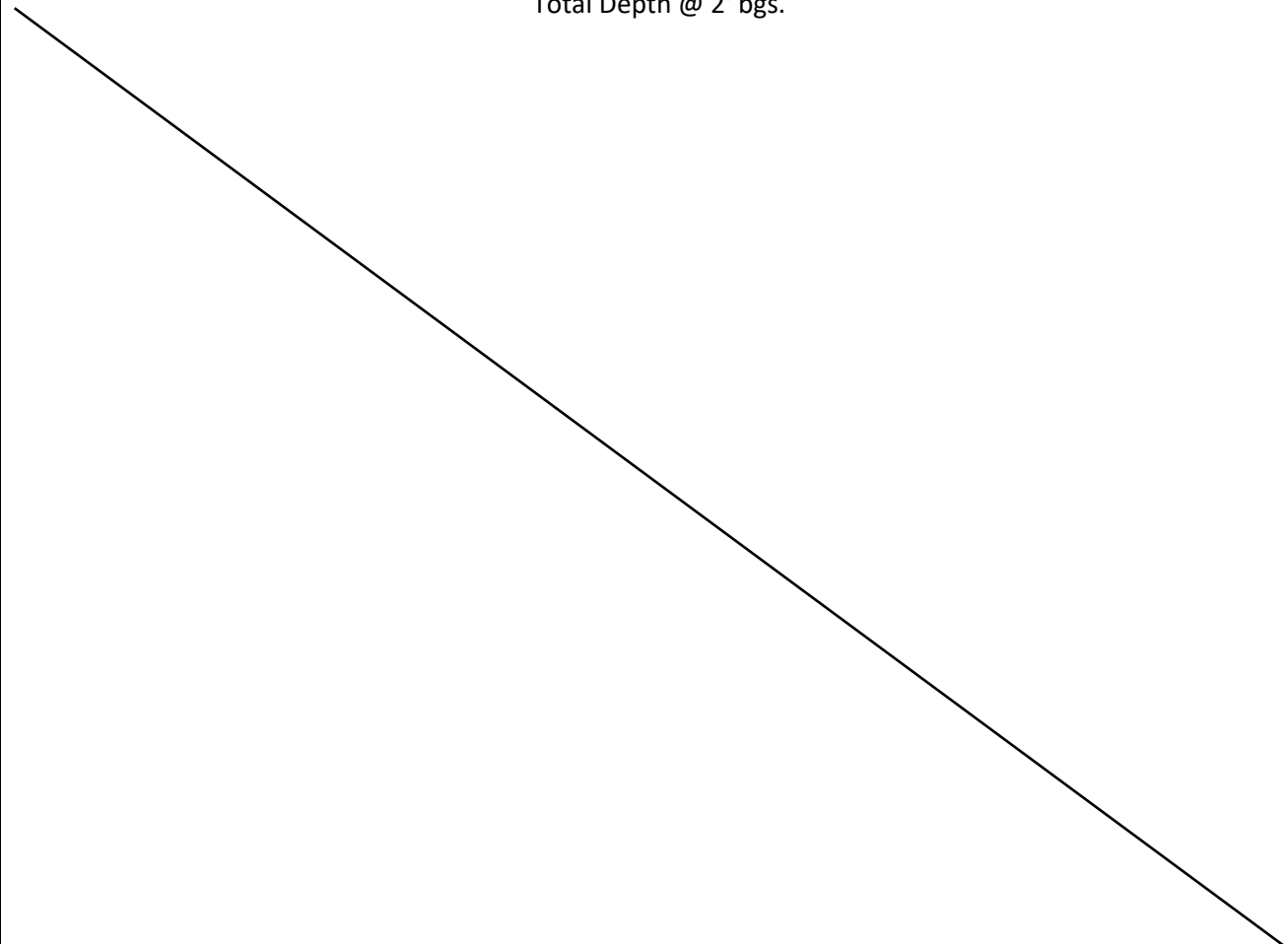
Photograph: 4 Date: 1/29/2024  
Description: Delineation activities, PH04.  
View: Northeast




## APPENDIX C


### Lithologic Soil Sampling Logs


---

		Sample Name: PH01		Date: 1/29/2024				
		Site Name: Corral Canyon 16-4 ST FED COM 126H						
		Incident Number: NAPP2335250734						
		Job Number: 03C1558302						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>				Logged By: M. O'Dell		Method: Backhoe		
Coordinates: 32.126093, -103.986555				Hole Diameter: ~3'		Total Depth: 2'		
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. All chloride measurements done with a +40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	33,370	0.6	Y	SS01	0.5	0	CCHE	CALICHE, off white, dry, moderately-well consolidated, very silty, no stain, no odor.
D	1,350	16.0	N		1	1		
D	<168	0.0	N	PH01	2	2		
Total Depth @ 2' bgs.								
								



 <b>ENSOLUM</b>		Sample Name: PH02		Date: 1/29/2024				
		Site Name: Corral Canyon 16-4 ST FED COM 126H						
		Incident Number: NAPP2335250734						
		Job Number: 03C1558302						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>				Logged By: M. O'Dell		Method: Backhoe		
Coordinates: 32.125985, -103.98986434				Hole Diameter: ~3'		Total Depth: 2'		
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. All chloride measurements done with a +40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	3,466	0.2	N	SS02	0.5	0	CCHE	CALICHE, off white, dry, moderately-well consolidated, very silty, no stain, no odor.
D	1,400	0.0	N		1	1		
D	<168	0.0	N	PH02	2	2		
Total Depth @ 2' bgs.								

		Sample Name: PH03		Date: 1/29/2024				
		Site Name: Corral Canyon 16-4 ST FED COM 126H						
		Incident Number: NAPP2335250734						
		Job Number: 03C1558302						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>				Logged By: M. O'Dell		Method: Backhoe		
Coordinates: 32.125867, -103.989601				Hole Diameter: ~3'		Total Depth: 2'		
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. All chloride measurements done with a +40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	10,018	0.3	N	SS03	0.5	0	CCHE	CALICHE, off white, dry, moderately-well consolidated, very silty, no stain, no odor.
D	1,689	0.0	N		1	1		
D	<168	0.0	N	PH03	2	2		
Total Depth @ 2' bgs.								

		Sample Name: PH04		Date: 1/29/2024				
		Site Name: Corral Canyon 16-4 ST FED COM 126H						
		Incident Number: NAPP2335250734						
		Job Number: 03C1558302						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>		Logged By: M. O'Dell		Method: Backhoe				
Coordinates: 32.125805, -103.986504		Hole Diameter: ~3'		Total Depth: 2'				
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. All chloride measurements done with a +40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	2,587	0.2	N	SS04	0.5	0	CCHE	CALICHE, off white, dry, moderately-well consolidated, very silty, no stain, no odor.
D	717	0.0	N		1	1		
D	207.2	0.0	N	PH04	2	2		
Total Depth @ 2' bgs.								
\								



## APPENDIX D

### Laboratory Analytical Reports & Chain of Custody Documentation

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Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 2/13/2024 12:23:26 PM Revision 1

## JOB DESCRIPTION

Corral Canyon 16-4 St Fed Com 126H  
03C15583C2

## JOB NUMBER

890-5999-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220



# 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



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

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2/13/2024 12:23:26 PM  
Revision 1

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Laboratory Job ID: 890-5999-1  
SDG: 03C15583C2

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Definitions/Glossary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

## Case Narrative

Client: Ensolum  
Project: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1

**Job ID: 890-5999-1**

**Eurofins Carlsbad**

### Job Narrative 890-5999-1

#### REVISION

The report being provided is a revision of the original report sent on 2/2/2024. The report (revision 1) is being revised due to Per client email, requesting project name correction.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### **Receipt**

The samples were received on 1/22/2024 8:09 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 1.8°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-5999-1), SS02 (890-5999-2), SS03 (890-5999-3) and SS04 (890-5999-4).

#### **GC VOA**

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-5999-1) and SS02 (890-5999-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-71830 and analytical batch 880-72093 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**

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-71573 and analytical batch 880-71736 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.

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Client Sample ID: SS01

Lab Sample ID: 890-5999-1

Date Collected: 01/19/24 12:54

Matrix: Solid

Date Received: 01/22/24 08:09

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/29/24 13:34	02/01/24 16:45	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/29/24 13:34	02/01/24 16:45	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/29/24 13:34	02/01/24 16:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/29/24 13:34	02/01/24 16:45	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/29/24 13:34	02/01/24 16:45	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/29/24 13:34	02/01/24 16:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	01/29/24 13:34	02/01/24 16:45	1
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130	01/29/24 13:34	02/01/24 16:45	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			02/01/24 16:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1510		49.7	mg/Kg			01/26/24 03:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		01/24/24 09:03	01/26/24 03:18	1
Diesel Range Organics (Over C10-C28)	1390		49.7	mg/Kg		01/24/24 09:03	01/26/24 03:18	1
Oil Range Organics (Over C28-C36)	115		49.7	mg/Kg		01/24/24 09:03	01/26/24 03:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	01/24/24 09:03	01/26/24 03:18	1
o-Terphenyl	93		70 - 130	01/24/24 09:03	01/26/24 03:18	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20700		249	mg/Kg			01/28/24 23:18	50

Client Sample ID: SS02

Lab Sample ID: 890-5999-2

Date Collected: 01/19/24 12:57

Matrix: Solid

Date Received: 01/22/24 08:09

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/29/24 13:34	02/01/24 17:05	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/29/24 13:34	02/01/24 17:05	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/29/24 13:34	02/01/24 17:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/29/24 13:34	02/01/24 17:05	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/29/24 13:34	02/01/24 17:05	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/29/24 13:34	02/01/24 17:05	1

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Client Sample ID: SS02

Lab Sample ID: 890-5999-2

Date Collected: 01/19/24 12:57

Matrix: Solid

Date Received: 01/22/24 08:09

Sample Depth: 0.5'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	01/29/24 13:34	02/01/24 17:05	1
1,4-Difluorobenzene (Surr)	72		70 - 130	01/29/24 13:34	02/01/24 17:05	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/01/24 17:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	287		50.0	mg/Kg			01/26/24 13:52	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		01/25/24 16:32	01/26/24 13:52	1
Diesel Range Organics (Over C10-C28)	287		50.0	mg/Kg		01/25/24 16:32	01/26/24 13:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/25/24 16:32	01/26/24 13:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			01/25/24 16:32	01/26/24 13:52	1
o-Terphenyl	101		70 - 130			01/25/24 16:32	01/26/24 13:52	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4230		49.6	mg/Kg			01/28/24 23:24	10

Client Sample ID: SS03

Lab Sample ID: 890-5999-3

Date Collected: 01/19/24 13:02

Matrix: Solid

Date Received: 01/22/24 08:09

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/29/24 13:34	02/01/24 17:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/29/24 13:34	02/01/24 17:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/29/24 13:34	02/01/24 17:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/29/24 13:34	02/01/24 17:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/29/24 13:34	02/01/24 17:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/29/24 13:34	02/01/24 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	01/29/24 13:34	02/01/24 17:26	1
1,4-Difluorobenzene (Surr)	75		70 - 130	01/29/24 13:34	02/01/24 17:26	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/01/24 17:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	133		49.6	mg/Kg			01/26/24 14:39	1

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Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Client Sample ID: SS03

Lab Sample ID: 890-5999-3

Date Collected: 01/19/24 13:02

Matrix: Solid

Date Received: 01/22/24 08:09

Sample Depth: 0.5'

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	<49.6	U	49.6	mg/Kg		01/25/24 16:32	01/26/24 14:39	1	
Diesel Range Organics (Over C10-C28)	133		49.6	mg/Kg		01/25/24 16:32	01/26/24 14:39	1	
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		01/25/24 16:32	01/26/24 14:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	90		70 - 130			01/25/24 16:32	01/26/24 14:39	1	
o-Terphenyl	106		70 - 130			01/25/24 16:32	01/26/24 14:39	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	5330		49.7	mg/Kg			01/28/24 23:31	10	

Client Sample ID: SS04

Lab Sample ID: 890-5999-4

Date Collected: 01/19/24 13:05

Matrix: Solid

Date Received: 01/22/24 08:09

Sample Depth: 0.5'

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		01/29/24 13:34	02/01/24 17:46	1	
Toluene	<0.00200	U	0.00200	mg/Kg		01/29/24 13:34	02/01/24 17:46	1	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/29/24 13:34	02/01/24 17:46	1	
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/29/24 13:34	02/01/24 17:46	1	
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/29/24 13:34	02/01/24 17:46	1	
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/29/24 13:34	02/01/24 17:46	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	74		70 - 130			01/29/24 13:34	02/01/24 17:46	1	
1,4-Difluorobenzene (Surr)	77		70 - 130			01/29/24 13:34	02/01/24 17:46	1	

Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00399	U	0.00399	mg/Kg			02/01/24 17:46	1	

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	65.2		49.6	mg/Kg			01/26/24 15:03	1	

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		01/25/24 16:32	01/26/24 15:03	1	
Diesel Range Organics (Over C10-C28)	65.2		49.6	mg/Kg		01/25/24 16:32	01/26/24 15:03	1	
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		01/25/24 16:32	01/26/24 15:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	92		70 - 130			01/25/24 16:32	01/26/24 15:03	1	
o-Terphenyl	102		70 - 130			01/25/24 16:32	01/26/24 15:03	1	

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Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

**Client Sample ID: SS04**  
**Date Collected: 01/19/24 13:05**  
**Date Received: 01/22/24 08:09**  
**Sample Depth: 0.5'**

**Lab Sample ID: 890-5999-4**  
**Matrix: Solid**

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1900		25.3	mg/Kg			01/28/24 23:38	5	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Surrogate Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-38339-A-101-C MS	Matrix Spike	116	99
880-38339-A-101-D MSD	Matrix Spike Duplicate	118	104
890-5999-1	SS01	80	67 S1-
890-5999-2	SS02	68 S1-	72
890-5999-3	SS03	93	75
890-5999-4	SS04	74	77
LCS 880-71830/1-A	Lab Control Sample	119	101
LCSD 880-71830/2-A	Lab Control Sample Dup	118	103
MB 880-71830/5-A	Method Blank	72	86
<b>Surrogate Legend</b>			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-38285-A-101-F MS	Matrix Spike	92	86
880-38285-A-101-G MSD	Matrix Spike Duplicate	96	90
890-5999-1	SS01	97	93
890-5999-2	SS02	86	101
890-5999-3	SS03	90	106
890-5999-4	SS04	92	102
890-6020-A-1-F MS	Matrix Spike	116	119
890-6020-A-1-G MSD	Matrix Spike Duplicate	114	117
LCS 880-71494/2-A	Lab Control Sample	98	123
LCS 880-71622/2-A	Lab Control Sample	86	109
LCSD 880-71494/3-A	Lab Control Sample Dup	90	108
LCSD 880-71622/3-A	Lab Control Sample Dup	75	92
MB 880-71494/1-A	Method Blank	97	104
MB 880-71622/1-A	Method Blank	108	129
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-71830/5-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 72093						Prep Batch: 71830			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		01/29/24 13:34	02/01/24 10:52	1	
Toluene	<0.00200	U	0.00200	mg/Kg		01/29/24 13:34	02/01/24 10:52	1	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/29/24 13:34	02/01/24 10:52	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/29/24 13:34	02/01/24 10:52	1	
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/29/24 13:34	02/01/24 10:52	1	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/29/24 13:34	02/01/24 10:52	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	72		70 - 130			01/29/24 13:34	02/01/24 10:52	1	
1,4-Difluorobenzene (Surr)	86		70 - 130			01/29/24 13:34	02/01/24 10:52	1	

Lab Sample ID: LCS 880-71830/1-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 72093						Prep Batch: 71830			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene			0.100	0.09795		mg/Kg		98	70 - 130
Toluene			0.100	0.1028		mg/Kg		103	70 - 130
Ethylbenzene			0.100	0.1207		mg/Kg		121	70 - 130
m-Xylene & p-Xylene			0.200	0.2505		mg/Kg		125	70 - 130
o-Xylene			0.100	0.1200		mg/Kg		120	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	119		70 - 130						
1,4-Difluorobenzene (Surr)	101		70 - 130						

Lab Sample ID: LCSD 880-71830/2-A						Client Sample ID: Lab Control Sample Dup					
Matrix: Solid						Prep Type: Total/NA					
Analysis Batch: 72093						Prep Batch: 71830					
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
	Benzene		0.100	0.09384		mg/Kg		94	70 - 130	4	35
	Toluene		0.100	0.09496		mg/Kg		95	70 - 130	8	35
	Ethylbenzene		0.100	0.1144		mg/Kg		114	70 - 130	5	35
	m-Xylene & p-Xylene		0.200	0.2345		mg/Kg		117	70 - 130	7	35
	o-Xylene		0.100	0.1120		mg/Kg		112	70 - 130	7	35
Surrogate		LCSD %Recovery	LCSD Qualifier	Limits							
4-Bromofluorobenzene (Surr)		118		70 - 130							
1,4-Difluorobenzene (Surr)		103		70 - 130							

Lab Sample ID: 880-38339-A-101-C MS							Client Sample ID: Matrix Spike				
Matrix: Solid							Prep Type: Total/NA				
Analysis Batch: 72093							Prep Batch: 71830				
Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier				Limits		
Benzene	<0.00201	U	0.100	0.08277		mg/Kg		83	70 - 130		
Toluene	<0.00201	U	0.100	0.08249		mg/Kg		82	70 - 130		

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QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

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

Lab Sample ID: 880-38339-A-101-C MS  
Matrix: Solid  
Analysis Batch: 72093

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 71830

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.09763		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1967		mg/Kg		98	70 - 130
o-Xylene	<0.00201	U	0.100	0.09515		mg/Kg		95	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	116		70 - 130						
1,4-Difluorobenzene (Surr)	99		70 - 130						

Lab Sample ID: 880-38339-A-101-D MSD  
Matrix: Solid  
Analysis Batch: 72093

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 71830

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00201	U	0.0990	0.1095		mg/Kg		111	70 - 130	28	35
Toluene	<0.00201	U	0.0990	0.1078		mg/Kg		109	70 - 130	27	35
Ethylbenzene	<0.00201	U	0.0990	0.1249		mg/Kg		126	70 - 130	25	35
m-Xylene & p-Xylene	<0.00402	U F1	0.198	0.2585	F1	mg/Kg		131	70 - 130	27	35
o-Xylene	<0.00201	U	0.0990	0.1237		mg/Kg		125	70 - 130	26	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	118		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-71494/1-A  
Matrix: Solid  
Analysis Batch: 71545

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 71494

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		01/24/24 09:03	01/25/24 19:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/24/24 09:03	01/25/24 19:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/24/24 09:03	01/25/24 19:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	97		70 - 130	01/24/24 09:03	01/25/24 19:43	1		
o-Terphenyl	104		70 - 130	01/24/24 09:03	01/25/24 19:43	1		

Lab Sample ID: LCS 880-71494/2-A  
Matrix: Solid  
Analysis Batch: 71545

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 71494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	991.7		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	988.8		mg/Kg		99	70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

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

Lab Sample ID: LCS 880-71494/2-A

Matrix: Solid

Analysis Batch: 71545

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 71494

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	123		70 - 130

Lab Sample ID: LCSD 880-71494/3-A

Matrix: Solid

Analysis Batch: 71545

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 71494

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	976.2		mg/Kg		98	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	963.2		mg/Kg		96	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 880-38285-A-101-F MS

Matrix: Solid

Analysis Batch: 71545

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 71494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	871.2		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	999	963.8		mg/Kg		94	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 880-38285-A-101-G MSD

Matrix: Solid

Analysis Batch: 71545

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 71494

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	<49.8	U	999	905.0		mg/Kg		91	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1023		mg/Kg		100	70 - 130	6	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	90		70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

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

Lab Sample ID: MB 880-71622/1-A

Matrix: Solid

Analysis Batch: 71655

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 71622

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		01/25/24 16:31	01/26/24 07:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/25/24 16:31	01/26/24 07:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/25/24 16:31	01/26/24 07:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			01/25/24 16:31	01/26/24 07:06	1
o-Terphenyl	129		70 - 130			01/25/24 16:31	01/26/24 07:06	1

Lab Sample ID: LCS 880-71622/2-A

Matrix: Solid

Analysis Batch: 71655

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 71622

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	928.7		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	932.5		mg/Kg		93	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	86		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-71622/3-A

Matrix: Solid

Analysis Batch: 71655

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 71622

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	878.9		mg/Kg		88	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	863.5		mg/Kg		86	70 - 130	8	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	75		70 - 130						
o-Terphenyl	92		70 - 130						

Lab Sample ID: 890-6020-A-1-F MS

Matrix: Solid

Analysis Batch: 71655

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 71622

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	1010	929.4		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<50.5	U	1010	1269		mg/Kg		124	70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

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

Lab Sample ID: 890-6020-A-1-F MS

Matrix: Solid

Analysis Batch: 71655

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 71622

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: 890-6020-A-1-G MSD

Matrix: Solid

Analysis Batch: 71655

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 71622

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	1010	960.4		mg/Kg		91	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.5	U	1010	1262		mg/Kg		123	70 - 130	1	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	114		70 - 130								
o-Terphenyl	117		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-71573/1-A

Matrix: Solid

Analysis Batch: 71736

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			01/28/24 21:56	1

Lab Sample ID: LCS 880-71573/2-A

Matrix: Solid

Analysis Batch: 71736

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	272.1		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-71573/3-A

Matrix: Solid

Analysis Batch: 71736

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	273.7		mg/Kg		109	90 - 110	1	20

Lab Sample ID: 880-38374-A-12-B MS

Matrix: Solid

Analysis Batch: 71736

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	2660	F1	1250	4029		mg/Kg		110	90 - 110

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QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-38374-A-12-C MSD					Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 71736												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	2660	F1	1250	4042	F1	mg/Kg	-	111	90 - 110	0	20	



## QC Association Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

## GC VOA

## Prep Batch: 71830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-1	SS01	Total/NA	Solid	5035	
890-5999-2	SS02	Total/NA	Solid	5035	
890-5999-3	SS03	Total/NA	Solid	5035	
890-5999-4	SS04	Total/NA	Solid	5035	
MB 880-71830/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-71830/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-71830/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-38339-A-101-C MS	Matrix Spike	Total/NA	Solid	5035	
880-38339-A-101-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 72093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-1	SS01	Total/NA	Solid	8021B	71830
890-5999-2	SS02	Total/NA	Solid	8021B	71830
890-5999-3	SS03	Total/NA	Solid	8021B	71830
890-5999-4	SS04	Total/NA	Solid	8021B	71830
MB 880-71830/5-A	Method Blank	Total/NA	Solid	8021B	71830
LCS 880-71830/1-A	Lab Control Sample	Total/NA	Solid	8021B	71830
LCSD 880-71830/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	71830
880-38339-A-101-C MS	Matrix Spike	Total/NA	Solid	8021B	71830
880-38339-A-101-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	71830

## Analysis Batch: 72206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-1	SS01	Total/NA	Solid	Total BTEX	
890-5999-2	SS02	Total/NA	Solid	Total BTEX	
890-5999-3	SS03	Total/NA	Solid	Total BTEX	
890-5999-4	SS04	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 71494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-71494/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-71494/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-71494/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-38285-A-101-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-38285-A-101-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 71545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-1	SS01	Total/NA	Solid	8015B NM	71494
MB 880-71494/1-A	Method Blank	Total/NA	Solid	8015B NM	71494
LCS 880-71494/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	71494
LCSD 880-71494/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	71494
880-38285-A-101-F MS	Matrix Spike	Total/NA	Solid	8015B NM	71494
880-38285-A-101-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	71494

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QC Association Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

GC Semi VOA

Prep Batch: 71622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-2	SS02	Total/NA	Solid	8015NM Prep	
890-5999-3	SS03	Total/NA	Solid	8015NM Prep	
890-5999-4	SS04	Total/NA	Solid	8015NM Prep	
MB 880-71622/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-71622/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-71622/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6020-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6020-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 71655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-2	SS02	Total/NA	Solid	8015B NM	71622
890-5999-3	SS03	Total/NA	Solid	8015B NM	71622
890-5999-4	SS04	Total/NA	Solid	8015B NM	71622
MB 880-71622/1-A	Method Blank	Total/NA	Solid	8015B NM	71622
LCS 880-71622/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	71622
LCSD 880-71622/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	71622
890-6020-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	71622
890-6020-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	71622

Analysis Batch: 71663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-1	SS01	Total/NA	Solid	8015 NM	
890-5999-2	SS02	Total/NA	Solid	8015 NM	
890-5999-3	SS03	Total/NA	Solid	8015 NM	
890-5999-4	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 71573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-1	SS01	Soluble	Solid	DI Leach	
890-5999-2	SS02	Soluble	Solid	DI Leach	
890-5999-3	SS03	Soluble	Solid	DI Leach	
890-5999-4	SS04	Soluble	Solid	DI Leach	
MB 880-71573/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-71573/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-71573/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-38374-A-12-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-38374-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 71736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5999-1	SS01	Soluble	Solid	300.0	71573
890-5999-2	SS02	Soluble	Solid	300.0	71573
890-5999-3	SS03	Soluble	Solid	300.0	71573
890-5999-4	SS04	Soluble	Solid	300.0	71573
MB 880-71573/1-A	Method Blank	Soluble	Solid	300.0	71573
LCS 880-71573/2-A	Lab Control Sample	Soluble	Solid	300.0	71573
LCSD 880-71573/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	71573
880-38374-A-12-B MS	Matrix Spike	Soluble	Solid	300.0	71573

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QC Association Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

HPLC/IC (Continued)

Analysis Batch: 71736 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38374-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	71573

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Client Sample ID: SS01

Date Collected: 01/19/24 12:54

Date Received: 01/22/24 08:09

Lab Sample ID: 890-5999-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	71830	01/29/24 13:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72093	02/01/24 16:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72206	02/01/24 16:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			71663	01/26/24 03:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	71494	01/24/24 09:03	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	71545	01/26/24 03:18	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	71573	01/25/24 09:38	SA	EET MID
Soluble	Analysis	300.0		50			71736	01/28/24 23:18	CH	EET MID

Client Sample ID: SS02

Date Collected: 01/19/24 12:57

Date Received: 01/22/24 08:09

Lab Sample ID: 890-5999-2

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	71830	01/29/24 13:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72093	02/01/24 17:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72206	02/01/24 17:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			71663	01/26/24 13:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	71622	01/25/24 16:32	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	71655	01/26/24 13:52	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	71573	01/25/24 09:38	SA	EET MID
Soluble	Analysis	300.0		10			71736	01/28/24 23:24	CH	EET MID

Client Sample ID: SS03

Date Collected: 01/19/24 13:02

Date Received: 01/22/24 08:09

Lab Sample ID: 890-5999-3

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	71830	01/29/24 13:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72093	02/01/24 17:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72206	02/01/24 17:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			71663	01/26/24 14:39	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	71622	01/25/24 16:32	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	71655	01/26/24 14:39	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	71573	01/25/24 09:38	SA	EET MID
Soluble	Analysis	300.0		10			71736	01/28/24 23:31	CH	EET MID

Client Sample ID: SS04

Date Collected: 01/19/24 13:05

Date Received: 01/22/24 08:09

Lab Sample ID: 890-5999-4

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	71830	01/29/24 13:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72093	02/01/24 17:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72206	02/01/24 17:46	SM	EET MID

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Lab Chronicle

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Client Sample ID: SS04

Date Collected: 01/19/24 13:05

Date Received: 01/22/24 08:09

Lab Sample ID: 890-5999-4

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			71663	01/26/24 15:03	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	71622	01/25/24 16:32	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	71655	01/26/24 15:03	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	71573	01/25/24 09:38	SA	EET MID
Soluble	Analysis	300.0		5			71736	01/28/24 23:38	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: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

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: Corral Canyon 16-4 St Fed Com 126H

Job ID: 890-5999-1  
SDG: 03C15583C2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5999-1	SS01	Solid	01/19/24 12:54	01/22/24 08:09	0.5'
890-5999-2	SS02	Solid	01/19/24 12:57	01/22/24 08:09	0.5'
890-5999-3	SS03	Solid	01/19/24 13:02	01/22/24 08:09	0.5'
890-5999-4	SS04	Solid	01/19/24 13:05	01/22/24 08:09	0.5'

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## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5999-1

SDG Number: 03C15583C2

Login Number: 5999

List Number: 1

Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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



Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5999-1  
SDG Number: 03C15583C2

Login Number: 5999  
List Number: 2  
Creator: Rodriguez, Leticia

List Source: Eurofins Midland  
List Creation: 01/23/24 12:33 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	



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ben Belill

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 2/12/2024 10:12:10 AM

## JOB DESCRIPTION

Corral Canyon 16-4 ST Fed Com 126H

03C1558302

## JOB NUMBER

890-6065-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

## Eurofins Carlsbad

### Job Notes

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

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

### Authorization



Generated  
2/12/2024 10:12:10 AM

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

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Laboratory Job ID: 890-6065-1  
SDG: 03C1558302

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Definitions/Glossary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1

**Job ID: 890-6065-1**

**Eurofins Carlsbad**

### Job Narrative 890-6065-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 1/30/2024 9:18 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 1.0°C

#### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH 01 (890-6065-1), PH 02 (890-6065-2), PH 03 (890-6065-3), PH 04 (890-6065-4), SS 05 (890-6065-5), SS 06 (890-6065-6), SS 07 (890-6065-7), SS 08 (890-6065-8), SS 09 (890-6065-9), SS 10 (890-6065-10), SS 11 (890-6065-11) and SS 12 (890-6065-12).

#### GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: PH 01 (890-6065-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC Semi VOA

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 870-17831 and analytical batch 870-17833 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

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

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: PH 01

Lab Sample ID: 890-6065-1

Date Collected: 01/29/24 09:45

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 2'

## 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		02/06/24 13:45	02/09/24 17:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 17:08	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 17:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/06/24 13:45	02/09/24 17:08	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 17:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/06/24 13:45	02/09/24 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	240	S1+	70 - 130	02/06/24 13:45	02/09/24 17:08	1
1,4-Difluorobenzene (Surr)	92		70 - 130	02/06/24 13:45	02/09/24 17:08	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			02/09/24 17:08	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			02/08/24 04:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<49.8	U F1	49.8	mg/Kg		02/02/24 16:37	02/08/24 04:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U F1	49.8	mg/Kg		02/02/24 16:37	02/08/24 04:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		02/02/24 16:37	02/08/24 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	94		70 - 130	02/02/24 16:37	02/08/24 04:16	1
1-Chlorooctane	88		70 - 130	02/02/24 16:37	02/08/24 04:16	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.5		4.96	mg/Kg			02/04/24 14:36	1

Client Sample ID: PH 02

Lab Sample ID: 890-6065-2

Date Collected: 01/29/24 10:25

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/06/24 13:45	02/09/24 17:28	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/06/24 13:45	02/09/24 17:28	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/06/24 13:45	02/09/24 17:28	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		02/06/24 13:45	02/09/24 17:28	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/06/24 13:45	02/09/24 17:28	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		02/06/24 13:45	02/09/24 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	02/06/24 13:45	02/09/24 17:28	1
1,4-Difluorobenzene (Surr)	111		70 - 130	02/06/24 13:45	02/09/24 17:28	1

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

## Client Sample ID: PH 02

## Lab Sample ID: 890-6065-2

Date Collected: 01/29/24 10:25

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 2'

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			02/09/24 17:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			02/08/24 05:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<50.1	U	50.1	mg/Kg		02/02/24 16:37	02/08/24 05:18	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		02/02/24 16:37	02/08/24 05:18	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		02/02/24 16:37	02/08/24 05:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	103		70 - 130			02/02/24 16:37	02/08/24 05:18	1
1-Chlorooctane	92		70 - 130			02/02/24 16:37	02/08/24 05:18	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	199		5.04	mg/Kg			02/04/24 14:42	1

## Client Sample ID: PH 03

## Lab Sample ID: 890-6065-3

Date Collected: 01/29/24 15:00

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 2'

## 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		02/06/24 13:45	02/09/24 17:49	1
Toluene	<0.00201	U	0.00201	mg/Kg		02/06/24 13:45	02/09/24 17:49	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		02/06/24 13:45	02/09/24 17:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/06/24 13:45	02/09/24 17:49	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/06/24 13:45	02/09/24 17:49	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/06/24 13:45	02/09/24 17:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			02/06/24 13:45	02/09/24 17:49	1
1,4-Difluorobenzene (Surr)	114		70 - 130			02/06/24 13:45	02/09/24 17:49	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			02/09/24 17:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			02/08/24 05:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<50.2	U	50.2	mg/Kg		02/02/24 16:37	02/08/24 05:39	1

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

## Client Sample ID: PH 03

Lab Sample ID: 890-6065-3

Date Collected: 01/29/24 15:00

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		02/02/24 16:37	02/08/24 05:39	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		02/02/24 16:37	02/08/24 05:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	102		70 - 130			02/02/24 16:37	02/08/24 05:39	1
1-Chlorooctane	95		70 - 130			02/02/24 16:37	02/08/24 05:39	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	413		4.99	mg/Kg			02/05/24 07:55	1

## Client Sample ID: PH 04

Lab Sample ID: 890-6065-4

Date Collected: 01/29/24 12:20

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 2'

## 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		02/06/24 13:45	02/09/24 18:09	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/06/24 13:45	02/09/24 18:09	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/06/24 13:45	02/09/24 18:09	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		02/06/24 13:45	02/09/24 18:09	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/06/24 13:45	02/09/24 18:09	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/06/24 13:45	02/09/24 18:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			02/06/24 13:45	02/09/24 18:09	1
1,4-Difluorobenzene (Surr)	111		70 - 130			02/06/24 13:45	02/09/24 18:09	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			02/09/24 18:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			02/08/24 05:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<50.4	U	50.4	mg/Kg		02/02/24 16:37	02/08/24 05:59	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		02/02/24 16:37	02/08/24 05:59	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		02/02/24 16:37	02/08/24 05:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	104		70 - 130			02/02/24 16:37	02/08/24 05:59	1
1-Chlorooctane	95		70 - 130			02/02/24 16:37	02/08/24 05:59	1

Eurofins Carlsbad

## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

## Client Sample ID: PH 04

Lab Sample ID: 890-6065-4

Date Collected: 01/29/24 12:20

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 2'

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	267		5.03	mg/Kg			02/05/24 08:02	1

## Client Sample ID: SS 05

Lab Sample ID: 890-6065-5

Date Collected: 01/29/24 15:25

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 18:30	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 18:30	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 18:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/06/24 13:45	02/09/24 18:30	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 18:30	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/06/24 13:45	02/09/24 18:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			02/06/24 13:45	02/09/24 18:30	1
1,4-Difluorobenzene (Surr)	110		70 - 130			02/06/24 13:45	02/09/24 18:30	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/09/24 18:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			02/08/24 06:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<50.2	U	50.2	mg/Kg		02/02/24 16:37	02/08/24 06:20	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		02/02/24 16:37	02/08/24 06:20	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		02/02/24 16:37	02/08/24 06:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	90		70 - 130			02/02/24 16:37	02/08/24 06:20	1
1-Chlorooctane	84		70 - 130			02/02/24 16:37	02/08/24 06:20	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	257		5.05	mg/Kg			02/03/24 19:29	1

## Client Sample ID: SS 06

Lab Sample ID: 890-6065-6

Date Collected: 01/29/24 14:00

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

## 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		02/06/24 13:45	02/09/24 18:50	1

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: SS 06

Lab Sample ID: 890-6065-6

Date Collected: 01/29/24 14:00

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 18:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 18:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/06/24 13:45	02/09/24 18:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 18:50	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/06/24 13:45	02/09/24 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	02/06/24 13:45	02/09/24 18:50	1
1,4-Difluorobenzene (Surr)	109		70 - 130	02/06/24 13:45	02/09/24 18:50	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			02/09/24 18:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			02/08/24 06:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<49.7	U	49.7	mg/Kg		02/02/24 16:37	02/08/24 06:41	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		02/02/24 16:37	02/08/24 06:41	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		02/02/24 16:37	02/08/24 06:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		70 - 130			02/02/24 16:37	02/08/24 06:41	1
1-Chlorooctane	88		70 - 130			02/02/24 16:37	02/08/24 06:41	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	271		4.97	mg/Kg			02/03/24 19:44	1

Client Sample ID: SS 07

Lab Sample ID: 890-6065-7

Date Collected: 01/29/24 14:10

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

## 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		02/06/24 13:45	02/09/24 19:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 19:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 19:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/06/24 13:45	02/09/24 19:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 19:11	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/06/24 13:45	02/09/24 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	02/06/24 13:45	02/09/24 19:11	1
1,4-Difluorobenzene (Surr)	111		70 - 130	02/06/24 13:45	02/09/24 19:11	1

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: SS 07

Lab Sample ID: 890-6065-7

Date Collected: 01/29/24 14:10

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

## 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			02/09/24 19:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.0		50.0	mg/Kg			02/08/24 07:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<50.0	U	50.0	mg/Kg		02/02/24 16:37	02/08/24 07:02	1
Diesel Range Organics (Over C10-C28)	51.0		50.0	mg/Kg		02/02/24 16:37	02/08/24 07:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/24 16:37	02/08/24 07:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	97		70 - 130			02/02/24 16:37	02/08/24 07:02	1
1-Chlorooctane	87		70 - 130			02/02/24 16:37	02/08/24 07:02	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	507		4.95	mg/Kg			02/03/24 19:49	1

Client Sample ID: SS 08

Lab Sample ID: 890-6065-8

Date Collected: 01/29/24 14:30

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 19:31	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 19:31	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 19:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/06/24 13:45	02/09/24 19:31	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/06/24 13:45	02/09/24 19:31	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/06/24 13:45	02/09/24 19:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			02/06/24 13:45	02/09/24 19:31	1
1,4-Difluorobenzene (Surr)	113		70 - 130			02/06/24 13:45	02/09/24 19:31	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			02/09/24 19:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.7		50.0	mg/Kg			02/08/24 07:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<50.0	U	50.0	mg/Kg		02/02/24 16:37	02/08/24 07:22	1

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: SS 08

Lab Sample ID: 890-6065-8

Date Collected: 01/29/24 14:30

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	55.7		50.0	mg/Kg		02/02/24 16:37	02/08/24 07:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/24 16:37	02/08/24 07:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	100		70 - 130			02/02/24 16:37	02/08/24 07:22	1
1-Chlorooctane	92		70 - 130			02/02/24 16:37	02/08/24 07:22	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	204		5.02	mg/Kg			02/03/24 19:54	1

Client Sample ID: SS 09

Lab Sample ID: 890-6065-9

Date Collected: 01/29/24 14:35

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		02/06/24 13:45	02/09/24 19:51	1
Toluene	<0.00201	U	0.00201	mg/Kg		02/06/24 13:45	02/09/24 19:51	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		02/06/24 13:45	02/09/24 19:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/06/24 13:45	02/09/24 19:51	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/06/24 13:45	02/09/24 19:51	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/06/24 13:45	02/09/24 19:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			02/06/24 13:45	02/09/24 19:51	1
1,4-Difluorobenzene (Surr)	113		70 - 130			02/06/24 13:45	02/09/24 19:51	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			02/09/24 19:51	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			02/08/24 07:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<49.9	U	49.9	mg/Kg		02/02/24 16:37	02/08/24 07:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/02/24 16:37	02/08/24 07:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/02/24 16:37	02/08/24 07:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	98		70 - 130			02/02/24 16:37	02/08/24 07:43	1
1-Chlorooctane	96		70 - 130			02/02/24 16:37	02/08/24 07:43	1

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

## Client Sample ID: SS 09

Lab Sample ID: 890-6065-9

Date Collected: 01/29/24 14:35

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	445		5.05	mg/Kg			02/03/24 19:58	1

## Client Sample ID: SS 10

Lab Sample ID: 890-6065-10

Date Collected: 01/29/24 14:40

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/06/24 13:45	02/09/24 20:12	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/06/24 13:45	02/09/24 20:12	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/06/24 13:45	02/09/24 20:12	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		02/06/24 13:45	02/09/24 20:12	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/06/24 13:45	02/09/24 20:12	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		02/06/24 13:45	02/09/24 20:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			02/06/24 13:45	02/09/24 20:12	1
1,4-Difluorobenzene (Surr)	111		70 - 130			02/06/24 13:45	02/09/24 20:12	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			02/09/24 20:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			02/08/24 08:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<49.6	U	49.6	mg/Kg		02/02/24 16:37	02/08/24 08:04	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		02/02/24 16:37	02/08/24 08:04	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		02/02/24 16:37	02/08/24 08:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	97		70 - 130			02/02/24 16:37	02/08/24 08:04	1
1-Chlorooctane	91		70 - 130			02/02/24 16:37	02/08/24 08:04	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	413		5.00	mg/Kg			02/03/24 20:03	1

## Client Sample ID: SS 11

Lab Sample ID: 890-6065-11

Date Collected: 01/29/24 14:45

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

## 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		02/06/24 13:45	02/09/24 22:02	1

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## Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: SS 11

Lab Sample ID: 890-6065-11

Date Collected: 01/29/24 14:45

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 22:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 22:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		02/06/24 13:45	02/09/24 22:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 22:02	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		02/06/24 13:45	02/09/24 22:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	02/06/24 13:45	02/09/24 22:02	1
1,4-Difluorobenzene (Surr)	104		70 - 130	02/06/24 13:45	02/09/24 22:02	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			02/09/24 22:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			02/08/24 08:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<50.1	U	50.1	mg/Kg		02/02/24 16:37	02/08/24 08:45	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		02/02/24 16:37	02/08/24 08:45	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		02/02/24 16:37	02/08/24 08:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		70 - 130			02/02/24 16:37	02/08/24 08:45	1
1-Chlorooctane	92		70 - 130			02/02/24 16:37	02/08/24 08:45	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	321		5.04	mg/Kg			02/03/24 20:08	1

Client Sample ID: SS 12

Lab Sample ID: 890-6065-12

Date Collected: 01/29/24 15:15

Matrix: Solid

Date Received: 01/30/24 09:18

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/06/24 13:45	02/09/24 22:23	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/06/24 13:45	02/09/24 22:23	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/06/24 13:45	02/09/24 22:23	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		02/06/24 13:45	02/09/24 22:23	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/06/24 13:45	02/09/24 22:23	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		02/06/24 13:45	02/09/24 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	02/06/24 13:45	02/09/24 22:23	1
1,4-Difluorobenzene (Surr)	110		70 - 130	02/06/24 13:45	02/09/24 22:23	1

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Client Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: SS 12  
Date Collected: 01/29/24 15:15  
Date Received: 01/30/24 09:18  
Sample Depth: 0.5'

Lab Sample ID: 890-6065-12  
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00396	U	0.00396	mg/Kg	-		02/09/24 22:23	1	
Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.4	U	50.4	mg/Kg	-		02/08/24 09:06	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)	<50.4	U	50.4	mg/Kg	-	02/02/24 16:37	02/08/24 09:06	1	
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg	-	02/02/24 16:37	02/08/24 09:06	1	
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg	-	02/02/24 16:37	02/08/24 09:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
o-Terphenyl	103		70 - 130			02/02/24 16:37	02/08/24 09:06	1	
1-Chlorooctane	97		70 - 130			02/02/24 16:37	02/08/24 09:06	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	430		5.01	mg/Kg	-		02/03/24 20:23	1	

## Surrogate Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-6065-1	PH 01	240 S1+	92
890-6065-1 MS	PH 01	108	106
890-6065-1 MSD	PH 01	104	104
890-6065-2	PH 02	98	111
890-6065-3	PH 03	96	114
890-6065-4	PH 04	111	111
890-6065-5	SS 05	106	110
890-6065-6	SS 06	111	109
890-6065-7	SS 07	110	111
890-6065-8	SS 08	102	113
890-6065-9	SS 09	110	113
890-6065-10	SS 10	108	111
890-6065-11	SS 11	85	104
890-6065-12	SS 12	88	110
LCS 880-72504/1-A	Lab Control Sample	103	108
LCSD 880-72504/2-A	Lab Control Sample Dup	95	105
MB 880-72504/5-A	Method Blank	119	127
<b>Surrogate Legend</b>			
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	OTPH1 (70-130)	1CO1 (70-130)
890-6065-1	PH 01	94	88
890-6065-1 MS	PH 01	76	79
890-6065-1 MSD	PH 01	72	75
890-6065-2	PH 02	103	92
890-6065-3	PH 03	102	95
890-6065-4	PH 04	104	95
890-6065-5	SS 05	90	84
890-6065-6	SS 06	97	88
890-6065-7	SS 07	97	87
890-6065-8	SS 08	100	92
890-6065-9	SS 09	98	96
890-6065-10	SS 10	97	91
890-6065-11	SS 11	100	92
890-6065-12	SS 12	103	97
LCS 870-17831/1-A	Lab Control Sample	102	107
LCSD 870-17831/2-A	Lab Control Sample Dup	101	107
MB 870-17831/3-A	Method Blank	106	102
<b>Surrogate Legend</b>			
OTPH = o-Terphenyl			
1CO = 1-Chlorooctane			

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## QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

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

Lab Sample ID: MB 880-72504/5-A

Matrix: Solid

Analysis Batch: 72754

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72504

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/06/24 13:45	02/09/24 16:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	02/06/24 13:45	02/09/24 16:39	1
1,4-Difluorobenzene (Surr)	127		70 - 130	02/06/24 13:45	02/09/24 16:39	1

Lab Sample ID: LCS 880-72504/1-A

Matrix: Solid

Analysis Batch: 72754

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 72504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1096		mg/Kg		110	70 - 130
Toluene	0.100	0.09393		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09541		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.2141		mg/Kg		107	70 - 130
o-Xylene	0.100	0.09277		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: LCSD 880-72504/2-A

Matrix: Solid

Analysis Batch: 72754

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 72504

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1034		mg/Kg		103	70 - 130	6	35
Toluene	0.100	0.09777		mg/Kg		98	70 - 130	4	35
Ethylbenzene	0.100	0.09367		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1975		mg/Kg		99	70 - 130	8	35
o-Xylene	0.100	0.08515		mg/Kg		85	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-6065-1 MS

Matrix: Solid

Analysis Batch: 72754

Client Sample ID: PH 01

Prep Type: Total/NA

Prep Batch: 72504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.09946		mg/Kg		99	70 - 130
Toluene	<0.00199	U	0.100	0.09257		mg/Kg		92	70 - 130

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QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

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

Lab Sample ID: 890-6065-1 MS  
Matrix: Solid  
Analysis Batch: 72754

Client Sample ID: PH 01  
Prep Type: Total/NA  
Prep Batch: 72504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.09174		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2088		mg/Kg		104	70 - 130
o-Xylene	<0.00199	U	0.100	0.09047		mg/Kg		90	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	108		70 - 130						
1,4-Difluorobenzene (Surr)	106		70 - 130						

Lab Sample ID: 890-6065-1 MSD  
Matrix: Solid  
Analysis Batch: 72754

Client Sample ID: PH 01  
Prep Type: Total/NA  
Prep Batch: 72504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.09528		mg/Kg		95	70 - 130	4	35
Toluene	<0.00199	U	0.101	0.09026		mg/Kg		90	70 - 130	3	35
Ethylbenzene	<0.00199	U	0.101	0.08571		mg/Kg		85	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1834		mg/Kg		91	70 - 130	13	35
o-Xylene	<0.00199	U	0.101	0.08671		mg/Kg		86	70 - 130	4	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	104		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 870-17831/3-A  
Matrix: Solid  
Analysis Batch: 17833

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 17831

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<50.0	U	50.0	mg/Kg		02/02/24 16:37	02/08/24 03:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/02/24 16:37	02/08/24 03:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/24 16:37	02/08/24 03:55	1
Surrogate	MB %Recovery	MB Qualifier	Limits					
o-Terphenyl	106		70 - 130					
1-Chlorooctane	102		70 - 130					

Lab Sample ID: LCS 870-17831/1-A  
Matrix: Solid  
Analysis Batch: 17833

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 17831

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)	1020	773.6		mg/Kg		76	70 - 130
Diesel Range Organics (Over C10-C28)	1010	960.6		mg/Kg		95	70 - 130

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QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

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

Lab Sample ID: LCS 870-17831/1-A  
Matrix: Solid  
Analysis Batch: 17833

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 17831

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	102		70 - 130
1-Chlorooctane	107		70 - 130

Lab Sample ID: LCSD 870-17831/2-A  
Matrix: Solid  
Analysis Batch: 17833

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 17831

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)			1020	776.7		mg/Kg		76	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1010	969.3		mg/Kg		96	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	101		70 - 130
1-Chlorooctane	107		70 - 130

Lab Sample ID: 890-6065-1 MS  
Matrix: Solid  
Analysis Batch: 17833

Client Sample ID: PH 01  
Prep Type: Total/NA  
Prep Batch: 17831

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)	<49.8	U F1	1020	620.6	F1	mg/Kg		61	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U F1	1010	735.9	F1	mg/Kg		69	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	76		70 - 130
1-Chlorooctane	79		70 - 130

Lab Sample ID: 890-6065-1 MSD  
Matrix: Solid  
Analysis Batch: 17833

Client Sample ID: PH 01  
Prep Type: Total/NA  
Prep Batch: 17831

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)	<49.8	U F1	1020	650.7	F1	mg/Kg		64	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1	1010	696.1	F1	mg/Kg		65	70 - 130	6	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	72		70 - 130
1-Chlorooctane	75		70 - 130

## QC Sample Results

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-72080/1-A

Matrix: Solid

Analysis Batch: 72176

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			02/03/24 18:45	1

Lab Sample ID: LCS 880-72080/2-A

Matrix: Solid

Analysis Batch: 72176

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.5		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-72080/3-A

Matrix: Solid

Analysis Batch: 72176

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	249.0		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 890-6065-11 MS

Matrix: Solid

Analysis Batch: 72176

Client Sample ID: SS 11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	321		252	565.2		mg/Kg		97	90 - 110

Lab Sample ID: 890-6065-11 MSD

Matrix: Solid

Analysis Batch: 72176

Client Sample ID: SS 11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	321		252	564.3		mg/Kg		96	90 - 110	0	20

Lab Sample ID: MB 880-71975/1-A

Matrix: Solid

Analysis Batch: 72257

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			02/04/24 11:33	1

Lab Sample ID: LCS 880-71975/2-A

Matrix: Solid

Analysis Batch: 72257

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.4		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-71975/3-A

Matrix: Solid

Analysis Batch: 72257

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	252.2		mg/Kg		101	90 - 110	0	20

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## QC Association Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

## GC VOA

## Prep Batch: 72504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-1	PH 01	Total/NA	Solid	5035	
890-6065-2	PH 02	Total/NA	Solid	5035	
890-6065-3	PH 03	Total/NA	Solid	5035	
890-6065-4	PH 04	Total/NA	Solid	5035	
890-6065-5	SS 05	Total/NA	Solid	5035	
890-6065-6	SS 06	Total/NA	Solid	5035	
890-6065-7	SS 07	Total/NA	Solid	5035	
890-6065-8	SS 08	Total/NA	Solid	5035	
890-6065-9	SS 09	Total/NA	Solid	5035	
890-6065-10	SS 10	Total/NA	Solid	5035	
890-6065-11	SS 11	Total/NA	Solid	5035	
890-6065-12	SS 12	Total/NA	Solid	5035	
MB 880-72504/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-72504/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-72504/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6065-1 MS	PH 01	Total/NA	Solid	5035	
890-6065-1 MSD	PH 01	Total/NA	Solid	5035	

## Analysis Batch: 72754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-1	PH 01	Total/NA	Solid	8021B	72504
890-6065-2	PH 02	Total/NA	Solid	8021B	72504
890-6065-3	PH 03	Total/NA	Solid	8021B	72504
890-6065-4	PH 04	Total/NA	Solid	8021B	72504
890-6065-5	SS 05	Total/NA	Solid	8021B	72504
890-6065-6	SS 06	Total/NA	Solid	8021B	72504
890-6065-7	SS 07	Total/NA	Solid	8021B	72504
890-6065-8	SS 08	Total/NA	Solid	8021B	72504
890-6065-9	SS 09	Total/NA	Solid	8021B	72504
890-6065-10	SS 10	Total/NA	Solid	8021B	72504
890-6065-11	SS 11	Total/NA	Solid	8021B	72504
890-6065-12	SS 12	Total/NA	Solid	8021B	72504
MB 880-72504/5-A	Method Blank	Total/NA	Solid	8021B	72504
LCS 880-72504/1-A	Lab Control Sample	Total/NA	Solid	8021B	72504
LCSD 880-72504/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	72504
890-6065-1 MS	PH 01	Total/NA	Solid	8021B	72504
890-6065-1 MSD	PH 01	Total/NA	Solid	8021B	72504

## Analysis Batch: 72851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-1	PH 01	Total/NA	Solid	Total BTEX	
890-6065-2	PH 02	Total/NA	Solid	Total BTEX	
890-6065-3	PH 03	Total/NA	Solid	Total BTEX	
890-6065-4	PH 04	Total/NA	Solid	Total BTEX	
890-6065-5	SS 05	Total/NA	Solid	Total BTEX	
890-6065-6	SS 06	Total/NA	Solid	Total BTEX	
890-6065-7	SS 07	Total/NA	Solid	Total BTEX	
890-6065-8	SS 08	Total/NA	Solid	Total BTEX	
890-6065-9	SS 09	Total/NA	Solid	Total BTEX	
890-6065-10	SS 10	Total/NA	Solid	Total BTEX	
890-6065-11	SS 11	Total/NA	Solid	Total BTEX	

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## QC Association Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

## GC VOA (Continued)

## Analysis Batch: 72851 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-12	SS 12	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 17831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-1	PH 01	Total/NA	Solid	8015NM Prep	
890-6065-2	PH 02	Total/NA	Solid	8015NM Prep	
890-6065-3	PH 03	Total/NA	Solid	8015NM Prep	
890-6065-4	PH 04	Total/NA	Solid	8015NM Prep	
890-6065-5	SS 05	Total/NA	Solid	8015NM Prep	
890-6065-6	SS 06	Total/NA	Solid	8015NM Prep	
890-6065-7	SS 07	Total/NA	Solid	8015NM Prep	
890-6065-8	SS 08	Total/NA	Solid	8015NM Prep	
890-6065-9	SS 09	Total/NA	Solid	8015NM Prep	
890-6065-10	SS 10	Total/NA	Solid	8015NM Prep	
890-6065-11	SS 11	Total/NA	Solid	8015NM Prep	
890-6065-12	SS 12	Total/NA	Solid	8015NM Prep	
MB 870-17831/3-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 870-17831/1-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 870-17831/2-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6065-1 MS	PH 01	Total/NA	Solid	8015NM Prep	
890-6065-1 MSD	PH 01	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 17833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-1	PH 01	Total/NA	Solid	8015B NM	17831
890-6065-2	PH 02	Total/NA	Solid	8015B NM	17831
890-6065-3	PH 03	Total/NA	Solid	8015B NM	17831
890-6065-4	PH 04	Total/NA	Solid	8015B NM	17831
890-6065-5	SS 05	Total/NA	Solid	8015B NM	17831
890-6065-6	SS 06	Total/NA	Solid	8015B NM	17831
890-6065-7	SS 07	Total/NA	Solid	8015B NM	17831
890-6065-8	SS 08	Total/NA	Solid	8015B NM	17831
890-6065-9	SS 09	Total/NA	Solid	8015B NM	17831
890-6065-10	SS 10	Total/NA	Solid	8015B NM	17831
890-6065-11	SS 11	Total/NA	Solid	8015B NM	17831
890-6065-12	SS 12	Total/NA	Solid	8015B NM	17831
MB 870-17831/3-A	Method Blank	Total/NA	Solid	8015B NM	17831
LCS 870-17831/1-A	Lab Control Sample	Total/NA	Solid	8015B NM	17831
LCSD 870-17831/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17831
890-6065-1 MS	PH 01	Total/NA	Solid	8015B NM	17831
890-6065-1 MSD	PH 01	Total/NA	Solid	8015B NM	17831

## Analysis Batch: 17891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-1	PH 01	Total/NA	Solid	8015 NM	
890-6065-2	PH 02	Total/NA	Solid	8015 NM	
890-6065-3	PH 03	Total/NA	Solid	8015 NM	
890-6065-4	PH 04	Total/NA	Solid	8015 NM	
890-6065-5	SS 05	Total/NA	Solid	8015 NM	

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## QC Association Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

## GC Semi VOA (Continued)

## Analysis Batch: 17891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-6	SS 06	Total/NA	Solid	8015 NM	
890-6065-7	SS 07	Total/NA	Solid	8015 NM	
890-6065-8	SS 08	Total/NA	Solid	8015 NM	
890-6065-9	SS 09	Total/NA	Solid	8015 NM	
890-6065-10	SS 10	Total/NA	Solid	8015 NM	
890-6065-11	SS 11	Total/NA	Solid	8015 NM	
890-6065-12	SS 12	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 71975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-1	PH 01	Soluble	Solid	DI Leach	
890-6065-2	PH 02	Soluble	Solid	DI Leach	
890-6065-3	PH 03	Soluble	Solid	DI Leach	
890-6065-4	PH 04	Soluble	Solid	DI Leach	
MB 880-71975/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-71975/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-71975/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Leach Batch: 72080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-5	SS 05	Soluble	Solid	DI Leach	
890-6065-6	SS 06	Soluble	Solid	DI Leach	
890-6065-7	SS 07	Soluble	Solid	DI Leach	
890-6065-8	SS 08	Soluble	Solid	DI Leach	
890-6065-9	SS 09	Soluble	Solid	DI Leach	
890-6065-10	SS 10	Soluble	Solid	DI Leach	
890-6065-11	SS 11	Soluble	Solid	DI Leach	
890-6065-12	SS 12	Soluble	Solid	DI Leach	
MB 880-72080/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-72080/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-72080/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6065-11 MS	SS 11	Soluble	Solid	DI Leach	
890-6065-11 MSD	SS 11	Soluble	Solid	DI Leach	

## Analysis Batch: 72176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-5	SS 05	Soluble	Solid	300.0	72080
890-6065-6	SS 06	Soluble	Solid	300.0	72080
890-6065-7	SS 07	Soluble	Solid	300.0	72080
890-6065-8	SS 08	Soluble	Solid	300.0	72080
890-6065-9	SS 09	Soluble	Solid	300.0	72080
890-6065-10	SS 10	Soluble	Solid	300.0	72080
890-6065-11	SS 11	Soluble	Solid	300.0	72080
890-6065-12	SS 12	Soluble	Solid	300.0	72080
MB 880-72080/1-A	Method Blank	Soluble	Solid	300.0	72080
LCS 880-72080/2-A	Lab Control Sample	Soluble	Solid	300.0	72080
LCSD 880-72080/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	72080
890-6065-11 MS	SS 11	Soluble	Solid	300.0	72080
890-6065-11 MSD	SS 11	Soluble	Solid	300.0	72080

Eurofins Carlsbad

QC Association Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

HPLC/IC

Analysis Batch: 72257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6065-1	PH 01	Soluble	Solid	300.0	71975
890-6065-2	PH 02	Soluble	Solid	300.0	71975
890-6065-3	PH 03	Soluble	Solid	300.0	71975
890-6065-4	PH 04	Soluble	Solid	300.0	71975
MB 880-71975/1-A	Method Blank	Soluble	Solid	300.0	71975
LCS 880-71975/2-A	Lab Control Sample	Soluble	Solid	300.0	71975
LCSD 880-71975/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	71975

Lab Chronicle

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: PH 01

Date Collected: 01/29/24 09:45

Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-1

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 17:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 04:16	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 04:16	WP	EET DAL
Soluble	Leach	DI Leach			5.04 g	50 mL	71975	01/30/24 16:02	SMC	EET MID
Soluble	Analysis	300.0		1			72257	02/04/24 14:36	CH	EET MID

Client Sample ID: PH 02

Date Collected: 01/29/24 10:25

Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 17:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 17:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 05:18	CC	EET DAL
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 05:18	WP	EET DAL
Soluble	Leach	DI Leach			4.96 g	50 mL	71975	01/30/24 16:02	SMC	EET MID
Soluble	Analysis	300.0		1			72257	02/04/24 14:42	CH	EET MID

Client Sample ID: PH 03

Date Collected: 01/29/24 15:00

Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-3

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			4.98 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 17:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 17:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 05:39	CC	EET DAL
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 05:39	WP	EET DAL
Soluble	Leach	DI Leach			5.01 g	50 mL	71975	01/30/24 16:02	SMC	EET MID
Soluble	Analysis	300.0		1			72257	02/05/24 07:55	CH	EET MID

Client Sample ID: PH 04

Date Collected: 01/29/24 12:20

Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-4

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 18:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 18:09	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: PH 04

Date Collected: 01/29/24 12:20

Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-4

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			17891	02/08/24 05:59	CC	EET DAL
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 05:59	WP	EET DAL
Soluble	Leach	DI Leach			4.97 g	50 mL	71975	01/30/24 16:02	SMC	EET MID
Soluble	Analysis	300.0		1			72257	02/05/24 08:02	CH	EET MID

Client Sample ID: SS 05

Date Collected: 01/29/24 15:25

Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 18:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 18:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 06:20	CC	EET DAL
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 06:20	WP	EET DAL
Soluble	Leach	DI Leach			4.95 g	50 mL	72080	01/31/24 17:55	SMC	EET MID
Soluble	Analysis	300.0		1			72176	02/03/24 19:29	CH	EET MID

Client Sample ID: SS 06

Date Collected: 01/29/24 14:00

Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 18:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 18:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 06:41	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 06:41	WP	EET DAL
Soluble	Leach	DI Leach			5.03 g	50 mL	72080	01/31/24 17:55	SMC	EET MID
Soluble	Analysis	300.0		1			72176	02/03/24 19:44	CH	EET MID

Client Sample ID: SS 07

Date Collected: 01/29/24 14:10

Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 19:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 19:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 07:02	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 07:02	WP	EET DAL

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: SS 07  
Date Collected: 01/29/24 14:10  
Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-7  
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			5.05 g	50 mL	72080	01/31/24 17:55	SMC	EET MID
Soluble	Analysis	300.0		1			72176	02/03/24 19:49	CH	EET MID

Client Sample ID: SS 08  
Date Collected: 01/29/24 14:30  
Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-8  
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			5.02 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 19:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 19:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 07:22	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 07:22	WP	EET DAL
Soluble	Leach	DI Leach			4.98 g	50 mL	72080	01/31/24 17:55	SMC	EET MID
Soluble	Analysis	300.0		1			72176	02/03/24 19:54	CH	EET MID

Client Sample ID: SS 09  
Date Collected: 01/29/24 14:35  
Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-9  
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			4.97 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 19:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 19:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 07:43	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 07:43	WP	EET DAL
Soluble	Leach	DI Leach			4.95 g	50 mL	72080	01/31/24 17:55	SMC	EET MID
Soluble	Analysis	300.0		1			72176	02/03/24 19:58	CH	EET MID

Client Sample ID: SS 10  
Date Collected: 01/29/24 14:40  
Date Received: 01/30/24 09:18

Lab Sample ID: 890-6065-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 20:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 20:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 08:04	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 08:04	WP	EET DAL
Soluble	Leach	DI Leach			5.00 g	50 mL	72080	01/31/24 17:55	SMC	EET MID
Soluble	Analysis	300.0		1			72176	02/03/24 20:03	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Client Sample ID: SS 11

Lab Sample ID: 890-6065-11

Date Collected: 01/29/24 14:45

Matrix: Solid

Date Received: 01/30/24 09:18

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 22:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 22:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 08:45	CC	EET DAL
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 08:45	WP	EET DAL
Soluble	Leach	DI Leach			4.96 g	50 mL	72080	01/31/24 17:55	SMC	EET MID
Soluble	Analysis	300.0		1			72176	02/03/24 20:08	CH	EET MID

Client Sample ID: SS 12

Lab Sample ID: 890-6065-12

Date Collected: 01/29/24 15:15

Matrix: Solid

Date Received: 01/30/24 09:18

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 22:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72851	02/09/24 22:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			17891	02/08/24 09:06	CC	EET DAL
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	17831	02/02/24 16:37	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17833	02/08/24 09:06	WP	EET DAL
Soluble	Leach	DI Leach			4.99 g	50 mL	72080	01/31/24 17:55	SMC	EET MID
Soluble	Analysis	300.0		1			72176	02/03/24 20:23	CH	EET MID

Laboratory References:

EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

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



Accreditation/Certification Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Laboratory: Eurofins Dallas

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704295-23-34	06-30-24

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

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

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

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 DAL
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET DAL
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET DAL
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 DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

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

Sample Summary

Client: Ensolum  
Project/Site: Corral Canyon 16-4 ST Fed Com 126H

Job ID: 890-6065-1  
SDG: 03C1558302

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6065-1	PH 01	Solid	01/29/24 09:45	01/30/24 09:18	2'
890-6065-2	PH 02	Solid	01/29/24 10:25	01/30/24 09:18	2'
890-6065-3	PH 03	Solid	01/29/24 15:00	01/30/24 09:18	2'
890-6065-4	PH 04	Solid	01/29/24 12:20	01/30/24 09:18	2'
890-6065-5	SS 05	Solid	01/29/24 15:25	01/30/24 09:18	0.5'
890-6065-6	SS 06	Solid	01/29/24 14:00	01/30/24 09:18	0.5'
890-6065-7	SS 07	Solid	01/29/24 14:10	01/30/24 09:18	0.5'
890-6065-8	SS 08	Solid	01/29/24 14:30	01/30/24 09:18	0.5'
890-6065-9	SS 09	Solid	01/29/24 14:35	01/30/24 09:18	0.5'
890-6065-10	SS 10	Solid	01/29/24 14:40	01/30/24 09:18	0.5'
890-6065-11	SS 11	Solid	01/29/24 14:45	01/30/24 09:18	0.5'
890-6065-12	SS 12	Solid	01/29/24 15:15	01/30/24 09:18	0.5'

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 204-5440, San Antonio, TX (210) 509-3344  
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:	Ben Belli	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Greene St.
City/State/Zip:	Carlsbad, NM 88220	City/State/Zip:	Carlsbad, NM 88220
Phone:	(989) 854-0852	Email:	Garrett.Green@ExxonMobil.com
Project Name:	Carlsbad, NM 1214-45T	Turn Around	
Project Number:	03C1550302	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pre-Code
Project Location:	32.12005, -103.46044	Due Date:	5 days
Sampler's Name:	Marianna O Bell	TAT starts the day received by the lab, if received by 4:30pm	
PO #:		Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

SAMPLE RECEIPT		Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	NA007
Samples Received Inact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor:	0.2	Temperature Reading:	1.2
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Corrected Temperature:	1.0		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Total Containers:					

Sample Identification	Matrix	Date	Time	Depth	Grab/Comp	# of Cont	Parameters
PH01	S	4/29/24	9:45	2'	G	1	Chlorides
PH02	S		10:25	2'			TPH
PH03	S		15:00	2'			BTEX
PH04	S		12:20	2'			
SS05	S		15:25	0.5'			
SS06	S		14:00	0.5'			
SS07	S		14:10	0.5'			
SS08	S		14:30	0.5'			
SS09	S		14:35	0.5'			
SS10	S		14:40	0.5'			

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<sub>2</sub> Na Sr Ti 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 Ti 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.

Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: <input type="checkbox"/>

Preservative Codes	Sample Comments
None: NO	Incident #:
Cool: Cool	NAAPP2335250734
HCL: HC	Cost center:
H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	1810101001
H <sub>3</sub> PO <sub>4</sub> : HP	Ben Belli:
NaHSO <sub>4</sub> : NABIS	bbelli@ensolum.com
Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub> : NASO <sub>3</sub>	API: 30-015-53142
Zn Acetate+NaOH: Zn	
NaOH+Ascorbic Acid: SABC	

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	9:18 1/30			





## Environment Testing

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. \_\_\_\_\_

## Chain of Custody

Project Manager:	Ben Bellini	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Greene St.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	(989) 854-0852	Email:	Garrett.Green@ExxonMobil.com

Work Order Comments			
Program:	UST/PST <input type="checkbox"/>	PRP <input type="checkbox"/>	Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:			
Reporting:	Level II <input type="checkbox"/>	Level III <input type="checkbox"/>	PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/>	Adapt <input type="checkbox"/>	Other: <input type="checkbox"/>

Project Name:	FEA 2000 22.6H	Turn Around	
Project Number:	03CL558302	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush
Project location:	32-12005-103.98040	Due Date:	5 days
Sampler's Name:	Marihana O'Dell	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			
<b>SAMPLE RECEIPT</b>			
Samples Received In tact:	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:	

[illegible][illegible]

Total 200.7 / 6010      200.8 / 6020:  
Circle Method(s) and Metal(s) to be analyzed

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<sub>2</sub> Na Sr Ti Sn U V Zn  
TCLP/SLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti I I  
Hr: 1631 / 2465 / 17470 / 2474

Notice: Signature of this document, relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, 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
<i>[Signature]</i>	<i>[Signature]</i>	7.18.13			





Environment Testing  
Xenco

Chain of Custody

Houston, TX (281) 240-4206, 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: \_\_\_\_\_

6064

www.xenco.com Page \_\_\_\_\_ of \_\_\_\_\_

Project Manager:	Bryan Moon	Bill to: (if different)	Bryan Moon CO2_ST_Invoices@kindermorgan.com
Company Name:	Kinder Morgan	Company Name:	Kinder Morgan Bryan.Moon@kindermorgan.com
Address:	1001 Louisiana Street	Address:	1001 Louisiana Street
City, State ZIP:	Houston, TX 77002	City, State ZIP:	Houston, TX 77002
Phone:	817-675-6107	Email:	jason_tomero@kindermorgan.com, iake_forsman@kindermorgan.com
Project Name:	2024 Wink Washout MP 117.2	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush
Project Number:	AFE	Due Date:	
Project Location:	West of Orta, TX	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:			
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes (No)	Wet Ice:	Yes No
	Samples Received In tact:	(Yes) No	Thermometer ID:	71111000
	Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
	Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	16.9
	Total Containers:		Corrected Temperature:	5.8

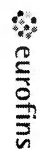
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TCLP	Total	PCB	Asbestos																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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## Eurofins Midland

1211 W. Florida Ave  
Midland, TX 79701  
Phone: 432-704-5440

## Chain of Custody Record



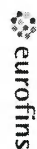
Environmental Testing

<b>Client Information (Sub Contract Lab)</b>						Sampler:	Lab PM:	COC No:									
Client Contact:						Kramer, Jessica		880-911.1									
Shipping/Receiving						E-Mail:	Jessica.Kramer@eurofins.com	State of Origin:									
Company:						New Mexico		Page:									
Eurofins Environment Testing South Cent						Accreditations Required (See note):	NELAP - Texas	Page 1 of 2									
Address:						Due Date Requested:	Job #:	890-6065-1									
City:						2/6/2024											
Dallas						TAT Requested (days):											
State, Zip:																	
TX, 75220						PO #:											
Phone:						WC #:											
214-902-0300(Tel)						Project #:											
Email:						SSOW#:											
Project Name:						Corral Canyon 16-4 ST Fed Com 126H											
Site:																	
<b>Sample Identification - Client ID (Lab ID)</b>						<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=comp, G=grab)</b>	<b>Matrix (Wwaste, Sewage, Stormwater, BTL Tissue, Air/Aq)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8015MOD_Calc</b>	<b>8015MOD_NM/8015NM_S_Prep</b>	<b>Total Number of containers</b>	<b>Special Instructions/Note:</b>		
PH 01 (890-6065-1)						1/29/24	09:45	Mountain	Solid	X	X					1	
PH 02 (890-6065-2)						1/29/24	10:25	Mountain	Solid	X	X					1	
PH 03 (890-6065-3)						1/29/24	15:00	Mountain	Solid	X	X					1	
PH 04 (890-6065-4)						1/29/24	12:20	Mountain	Solid	X	X					1	
SS 05 (890-6065-5)						1/29/24	15:25	Mountain	Solid	X	X					1	
SS 06 (890-6065-6)						1/29/24	14:00	Mountain	Solid	X	X					1	
SS 07 (890-6065-7)						1/29/24	14:10	Mountain	Solid	X	X					1	
SS 08 (890-6065-8)						1/29/24	14:30	Mountain	Solid	X	X					1	
SS 09 (890-6065-9)						1/29/24	14:35	Mountain	Solid	X	X					1	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/mark being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.</p>																	
<b>Possible Hazard Identification</b>																	
<b>Unconfirmed</b>																	
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2																	
Empty Kit Relinquished by: Date: Time: Method of Shipment:																	
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:																	
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:																	
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:																	
Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: 1/6 THRUOUT -14																	
Δ Yes Δ No																	

## Eurofins Midland

1211 W. Florida Ave  
Midland, TX 79701  
Phone: 432-704-5440

## Chain of Custody Record



## Environmental Testing

[illegible]

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6065-1

SDG Number: 03C1558302

Login Number: 6065  
List Number: 1  
Creator: Bruns, Shannon

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: 890-6065-1

SDG Number: 03C1558302

Login Number: 6065

List Source: Eurofins Dallas

List Number: 3

List Creation: 02/06/24 10:34 AM

Creator: Sharp, Michael

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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6065-1

SDG Number: 03C1558302

Login Number: 6065

List Source: Eurofins Midland

List Number: 2

List Creation: 01/31/24 12:23 PM

Creator: Rodriguez, Leticia

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	

**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**  
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QUESTIONS  
  
Action 391909

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 391909
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335250734
Incident Name	NAPP2335250734 CORRAL CANYON 16-4 ST FED COM 126H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	CORRAL CANYON 16-4 ST FED COM 126H
Date Release Discovered	12/08/2023
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Other   Other (Specify)   Produced Water   Released: 15 BBL   Recovered: 12 BBL   Lost: 3 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	A 2" chiksan connection in the flowback iron washed out, releasing fluids to pad.



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QUESTIONS, Page 2

Action 391909

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
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**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Melanie Collins Title: Regulatory Analyst Email: Melanie.Collins@exxonmobil.com Date: 12/18/2023
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QUESTIONS, Page 3

Action 391909

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	391909
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	U.S. Geological Survey
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 300 and 500 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	20700
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	1510
GRO+DRO	(EPA SW-846 Method 8015M)	1390
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	07/04/2024
On what date will (or did) the final sampling or liner inspection occur	09/27/2024
On what date will (or was) the remediation complete(d)	09/27/2024
What is the estimated surface area (in square feet) that will be reclaimed	5252
What is the estimated volume (in cubic yards) that will be reclaimed	389
What is the estimated surface area (in square feet) that will be remediated	5252
What is the estimated volume (in cubic yards) that will be remediated	389

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4  
Action 391909

QUESTIONS (continued)

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	391909
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	No
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
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.	
I hereby agree and sign off to the above statement	Name: Kailee Smith Title: Regulatory Analyst Email: kailee.smith@exxonmobil.com Date: 10/11/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5  
  
Action 391909

QUESTIONS (continued)

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	391909
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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Action 391909

**QUESTIONS (continued)**

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	5380
	Action Number:
	391909
Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	384935
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/27/2024
What was the (estimated) number of samples that were to be gathered	35
What was the sampling surface area in square feet	7000

**Remediation Closure Request**

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	5252
What was the total volume (cubic yards) remediated	389
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	5252
What was the total volume (in cubic yards) reclaimed	389
Summarize any additional remediation activities not included by answers (above)	Excavation activities were conducted at the Site as indicated in the RWP to address the December 2023 release of produced water. Laboratory analytical results for all excavation soil samples collected indicate COC concentrations were compliant with the Closure Criteria. Based on the soil sample laboratory analytical results, no further remediation is required. The excavation will be backfilled with material purchased locally and the Site will be recontoured to match pre-existing site conditions. Excavation of soil has mitigated impacts exceeding the Closure Criteria at the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2335250734.

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 (in .pdf format) 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.

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.

I hereby agree and sign off to the above statement	Name: Kailee Smith Title: Regulatory Analyst Email: kailee.smith@exxonmobil.com Date: 10/11/2024
--	---

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Action 391909

QUESTIONS (continued)

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	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No



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CONDITIONS  
  
Action 391909

CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
scwells	None	10/22/2024