



October 16, 2024

New Mexico Oil Conservation Division

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

**Re: Closure Request Addendum
Corral Canyon Expansion Battery
Incident Number NAPP2322648859
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request Addendum* to present additional remediation activities completed at the Corral Canyon Expansion Battery (Site), in response to the denial of the original *Closure Request*, submitted to the New Mexico Oil Conservation Division (NMOCD) on October 30, 2023. In the denial, NMOCD indicated that an inadequate number of floor samples were collected. Based on excavation and soil sampling activities described below, XTO is submitting this *Closure Request Addendum* and requesting no further action for Incident Number NAPP2322648859.

BACKGROUND

The Site is located in Unit P, Section 5, Township 25 South, Range 29 East in Eddy County, New Mexico (32.15338°, -103.99937°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On August 2, 2023, a broken nipple on the flush line of the pump seal released approximately 5.15 barrels (bbls) of produced water into the pump containment, the adjacent tank containment, and onto the caliche pad. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; 5 bbls of produced water were recovered from within the lined containment. XTO reported the release to the NMOCD on a Release Notification Form C-141 (Form C-141) on August 14, 2023. The release was assigned Incident Number NAPP2322648859.

The *Closure Request* detailed the Site characterization completed 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 in the original *Closure Request* submitted October 31, 2023. Potential site receptors are identified on Figure 1. Based on the results of the Site Characterization, the following 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

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- Chloride: 10,000 mg/kg

Between September 25 and October 5, 2023, Ensolum conducted Site assessment, delineation, and liner inspection activities in response to the release. A liner integrity inspection was conducted on the pump containment and the tank battery containment. Upon inspection, the pump containment liner had no tears or damage and was operating as designed. However, the tank battery containment was not operating as designed and delineation via hand auger (BH01) was conducted where the hole in the liner was found. Two potholes (SS01/PH01 and SS02/PH02) were advanced within the release extent to vertically define the release extent, and four delineation soil samples (SS03 through SS06) were collected outside the release extent to laterally define the release extent. Based on laboratory analytical results from the delineation soil sampling activities, impacted soil was not present at the Site.

XTO submitted a *Closure Request* on October 31, 2023, requesting no further action (NFA) for the release. All previously completed remedial activities can be found on the original *Closure Request* included in Appendix A. On March 3, 2024, NMOCD denied the *Closure Request* for Incident Number NAPP2322648859 for the following reasons:

The Closure Report is Denied. When equipment is located in and around the release area, samples must come from the sidewalls of the release area excavation. The Closure Report includes an inadequate number of floor samples. Please collect confirmation samples, representing no more than 200 ft².

In response to the denial, excavation and confirmation soil sampling activities were warranted.

EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

On May 22, 2024, Ensolum personnel returned to the Site to oversee excavation activities. While the entirety of the release occurred on an active facility pad, in order to alleviate concerns regarding future reclamation of the Site, a reclamation requirement of 100 mg/kg TPH and 600 mg/kg chloride was applied in the top four feet. Excavation activities occurred on the northern half of the release extent area, encompassing delineation soil sample SS01, which is the only delineation soil sample that indicated COC concentrations exceeding the reclamation requirement (chloride: 2,360 mg/kg). Excavation activities were performed using a backhoe and transport vehicle. To direct excavation activities, soil was screened for volatile organic compounds (VOCs) and chloride utilizing a photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to a total depth of 0.5 feet bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following the removal of the waste-containing soil, 5-point composite soil samples were collected at least every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite floor samples FS01 through FS05 were collected from the floor of the excavation at a depth of 0.5 feet bgs. Composite sidewall sample SW01 was collected from depths ranging from ground surface to 0.5 feet bgs. Confirmation soil samples CS01 through CS05 were collected from the surface of the remainder of the release extent, where excavation was not conducted. Since soil samples CS01 through CS05 were collected on the surface of the pad, and not within an excavated area, sidewall soil samples could not be retrieved. All confirmation 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 constituents of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH- GRO, TPH- DRO, and TPH-oil range organics (ORO)

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following EPA Method 8015M/D; and chloride following Standard Method SM4500. The excavation extent and confirmation soil sample locations are presented on Figure 2.

The excavation area measured approximately 972 square feet. The impacted soil was transported and properly disposed of at the R360 Disposal Facility in Hobbs, New Mexico. A total of 118 cubic yards of waste-containing soil were removed from the Site.

Laboratory analytical results for all confirmation soil samples collected indicated all COC concentrations were in compliance with Closure Criteria and the reclamation requirement. The laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included in Appendix C.

CLOSURE REQUEST

Excavation and soil sampling activities were conducted at the Site to address the August 2, 2023, produced water release. Laboratory analytical results from all confirmation soil samples collected from the final excavation extent or on the surface within the release extent area, indicated that all COC concentrations were in compliance with the Closure Criteria and reclamation requirement. Based on soil sample analytical results, no further remediation is required. The excavation was backfilled with material purchased locally and the surface recontoured to match pre-existing Site conditions.

Excavation of waste-containing soil has mitigated impacts at this Site. Depth to groundwater has been determined to be between 51 and 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2322648859.

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

Sincerely,
Ensolum, LLC



Benjamin J. Belill
Senior Geologist



Tacoma Morrissey
Associate Principal

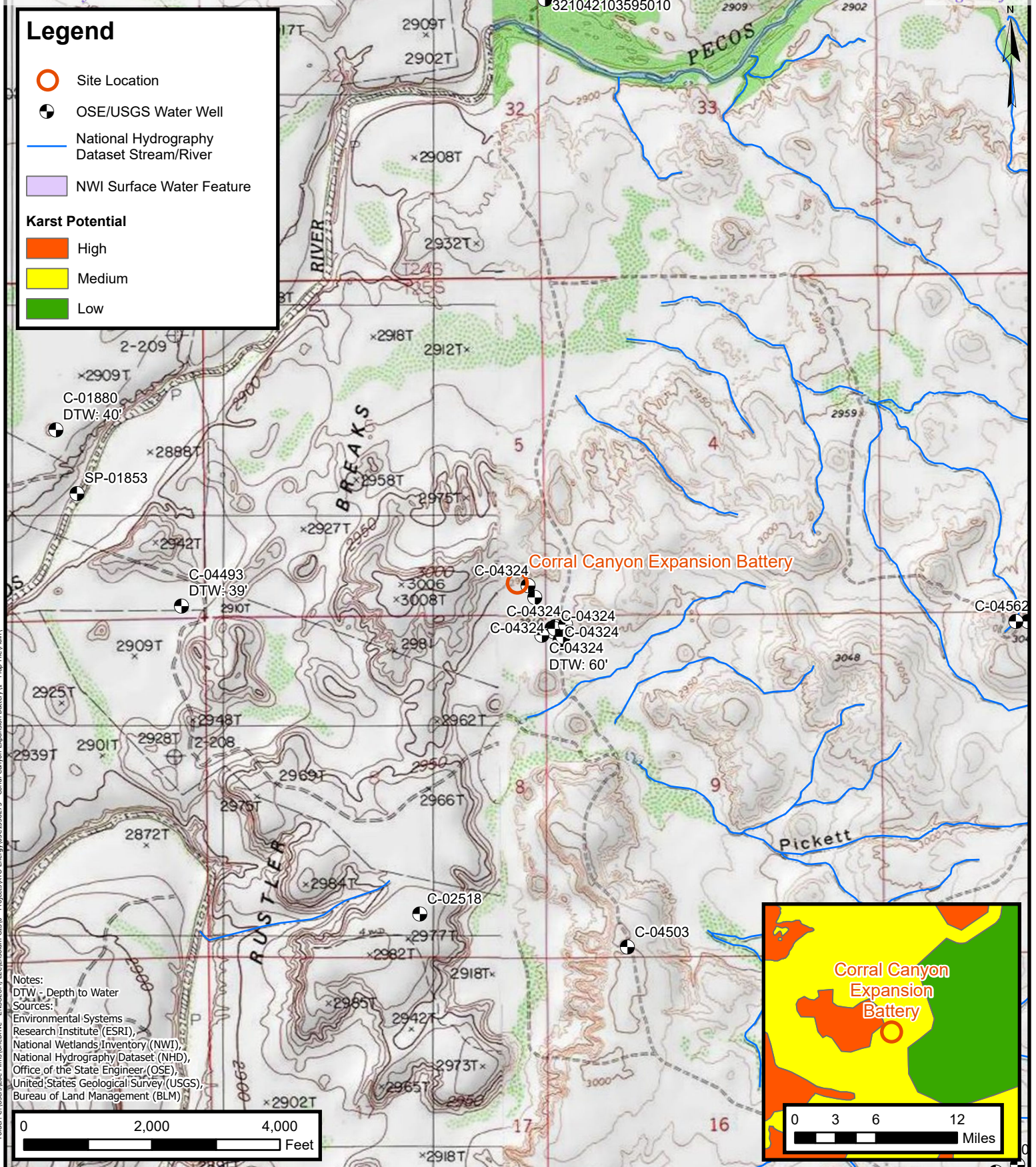
cc: Kaylan Dirkx, XTO
Colton Brown, XTO
BLM

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Confirmation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Closure Request Report; Dated October 30, 2023.
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES



Site Receptor Map

XTO Energy, Inc
Corral Canyon Expansion Battery
Incident Number: nAPP2322648859
Unit P, Sec 5, T25S, R29E
Eddy County, New Mexico

FIGURE

1

Legend

- Delineation Soil Samples in Compliance with NMOCD Closure Criteria
- Release Extent



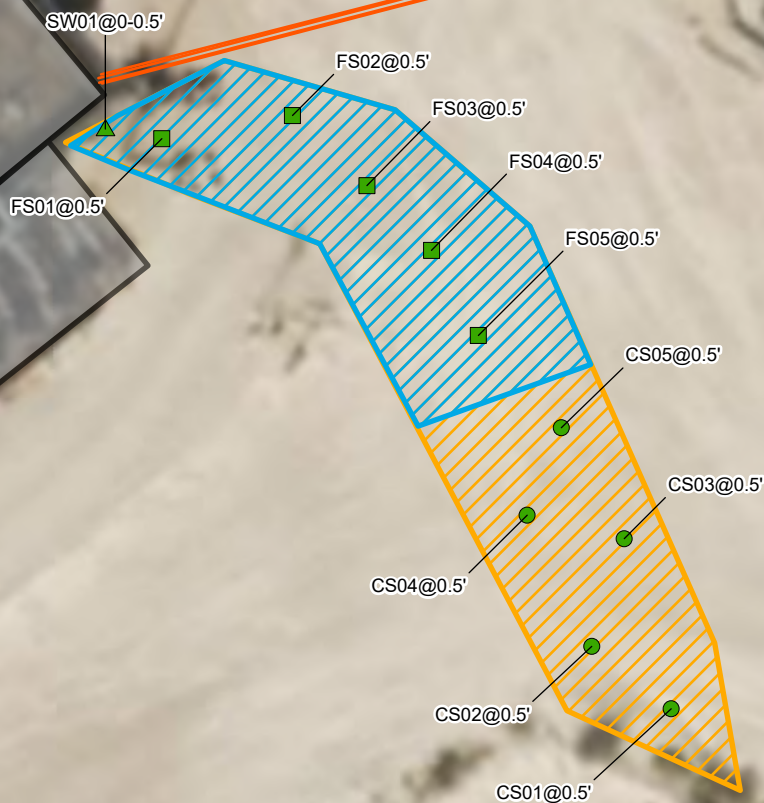
Delineation Soil Sample Locations

XTO Energy, Inc
Corral Canyon Expansion Battery
Incident Number: nAPP2322648859
Unit P, Sec 5, T25S, R29E
Eddy County, New Mexico

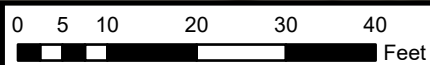
FIGURE
2

Legend

- Confirmation Floor Sample in Compliance with Closure Criteria
- Confirmation Composite Sample in Compliance with Closure Criteria
- ▲ Confirmation Sidewall Sample in Compliance with Closure Criteria
- Electric Utility Line
- ▨ Release Extent
- ▨ Liner Containment Area
- ▨ Excavation Extent



Notes:
Sample ID @ Depth Below Ground Surface.



Sources: Environmental Systems Research Institute (ESRI)



Confirmation Soil Sample Locations

XTO Energy, Inc
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Unit P, Sec 5, T25S, R29E
Eddy County, New Mexico

FIGURE

3



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Corral Canyon Expansion Battery
 XTO Energy, Inc
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Delineation Soil Samples										
SS04	09/25/2023	0.5	<0.00200	<0.00404	<50.5	<50.5	<50.5	<50.5	<50.5	2,360
PH01	10/05/2023	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	378
SS02	09/25/2023	0.5	<0.00202	<0.00403	<49.6	<49.6	<49.6	<49.6	<49.6	40.5
PH02	10/05/2023	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	291
BH01	10/05/2023	0.5	<0.00201	<0.00402	<50.1	<50.1	<50.1	<50.1	<50.1	72.7
BH01A	10/05/2023	1	<0.00199	<0.00398	<50.2	<50.2	<50.2	<50.2	<50.2	105
SS03	09/25/2023	0.5	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	192
SS04	09/25/2023	0.5	<0.00200	<0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	334
SS05	09/25/2023	0.5	<0.00201	<0.00402	<50.4	<50.4	<50.4	<50.4	<50.4	538
SS06	09/25/2023	0.5	<0.00202	<0.00404	<50.5	<50.5	<50.5	<50.5	<50.5	143
Confirmation Soil Samples										
CS01	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64
CS02	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS03	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	528
CS04	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
CS05	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
FS01	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	592
FS02	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288
FS03	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	496
FS04	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	496
FS05	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336
SW01	05/22/2024	0-0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144

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

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



APPENDIX A

Closure Request Report; Dated October 30, 2023.



October 30, 2023

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

**Re: Closure Request
Corral Canyon Expansion Battery
Incident Number NAPP2322648859
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 site assessment and soil sampling activities performed at the Corral Canyon Expansion Battery (Site). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil resulting from a release of produced water within and around a lined containment at the Site. Based on field observations, field screening activities, and laboratory analytical results, XTO is submitting this Closure Request and requesting closure for Incident Number NAPP2322648859.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit P, Section 05, Township 25 South, Range 29 East in Eddy County, New Mexico (32.15338°, -103.99937°) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land.

On August 2, 2023, a broken nipple on the flush line of the pump seal released approximately 5.15 barrels (bbls) of produced water into the pump containment, the adjacent tank containment, and onto the caliche pad. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; 5 bbls of produced water were recovered from within the lined containment. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 14, 2023. The release was assigned Incident Number NAPP2322648859.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is between 51 and 100 feet below ground surface (bgs) based on soil boring C-04324, permitted by the New Mexico Office of the State Engineer. The soil boring was drilled to a depth of 69 feet bgs and has a recorded depth to groundwater of 65 feet bgs. The location of the soil boring is approximately 351 feet southeast of the release area and is depicted on Figure 1. The

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borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record and Log is included in Appendix A.

The closest continuously flowing or significant watercourse is greater than 300 feet from the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). 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: 10,000 mg/kg

SITE ASSESSMENT ACTIVITIES

A 48-hour advance notice of liner inspection was provided via email to the NMOCD. On September 25, 2023, a liner integrity inspection was conducted by Ensolum personnel for both the pump containment and storage tank containment. Upon inspection, the pump containment liner had no tears or damage and was operating as designed. However, the tank battery containment was determined to be insufficient.

While onsite, Ensolum personnel evaluated the release extent outside of the lined containments based on information provided on the Form C-141 and visual observations. Assessment soil samples SS01 and SS02 were collected within the visible release extent at a depth of 0.5 feet bgs to assess surficial soil within the release. Assessment soil samples SS03 through SS06 were collected around the visible release extent at a depth of 0.5 feet bgs to confirm the lateral extent of the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included as Appendix B.

The assessment 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.

Laboratory analytical results for assessment soil samples SS01 and SS02, collected within the release extent, indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for assessment soil samples SS03 through SS06, collected around the release extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria and successfully defined the lateral extent of the release. Based on visual observations and laboratory

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analytical results, additional assessment activities were warranted to confirm the absence of impacted soil beneath the storage tank containment liner and within the release area outside of containment. The laboratory analytical results are summarized in Table 1.

DELINEATION ACTIVITIES

On October 5, 2023, Ensolum personnel advanced one borehole (BH01) via hand-auger at the location of the tear in the liner of the tank battery containment, identified during the liner integrity inspection. Two discrete delineation soil samples were collected from the borehole at depths of 0.5 feet and 1-foot bgs. Additionally, two potholes (PH01 and PH02) were advanced via backhoe in the release area outside of containment at the location of assessment samples SS01 and SS02. One discrete delineation soil sample was collected from each pothole at a depth of 1-foot bgs. Soil from the delineation samples was field screened for VOCs and chloride. Field screening results and observations were documented on lithologic/soil sampling logs, which are included as Appendix C. The soil samples were collected, handled, and analyzed as previously described.

The borehole and potholes were backfilled with soil removed and an XTO contractor repaired the tear in the liner. The soil sample locations are depicted on Figure 2. Photographic documentation was conducted during delineation activities and a photographic log is included in Appendix B.

Laboratory analytical results for delineation soil samples BH01, BH01A, PH01, and PH02 indicated that all COC concentrations were compliant with the most stringent Table I Closure Criteria and confirmed the absence of impacted soil resulting from the release. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Appendix D.

CLOSURE REQUEST

Site assessment and delineation activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the August 2, 2023, produced water release. Laboratory analytical results for the delineation soil samples collected within and around the release extent outside of the containment and directly beneath the tear in the liner indicated all COC concentrations were compliant with the Site Closure Criteria and provided lateral and vertical delineation to below the most stringent Table I Closure Criteria.

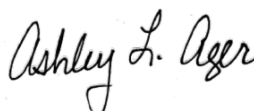
Based on initial response efforts and soil sample laboratory analytical results compliant with the Site Closure Criteria, XTO respectfully requests closure for Incident Number NAPP2322648859.

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

Sincerely,
Ensolum, LLC



Tacoma Morrissey
Senior Geologist, MS



Ashley Ager
Principal, MS, PG

XTO Energy, Inc.
Closure Request
Corral Canyon Expansion Battery

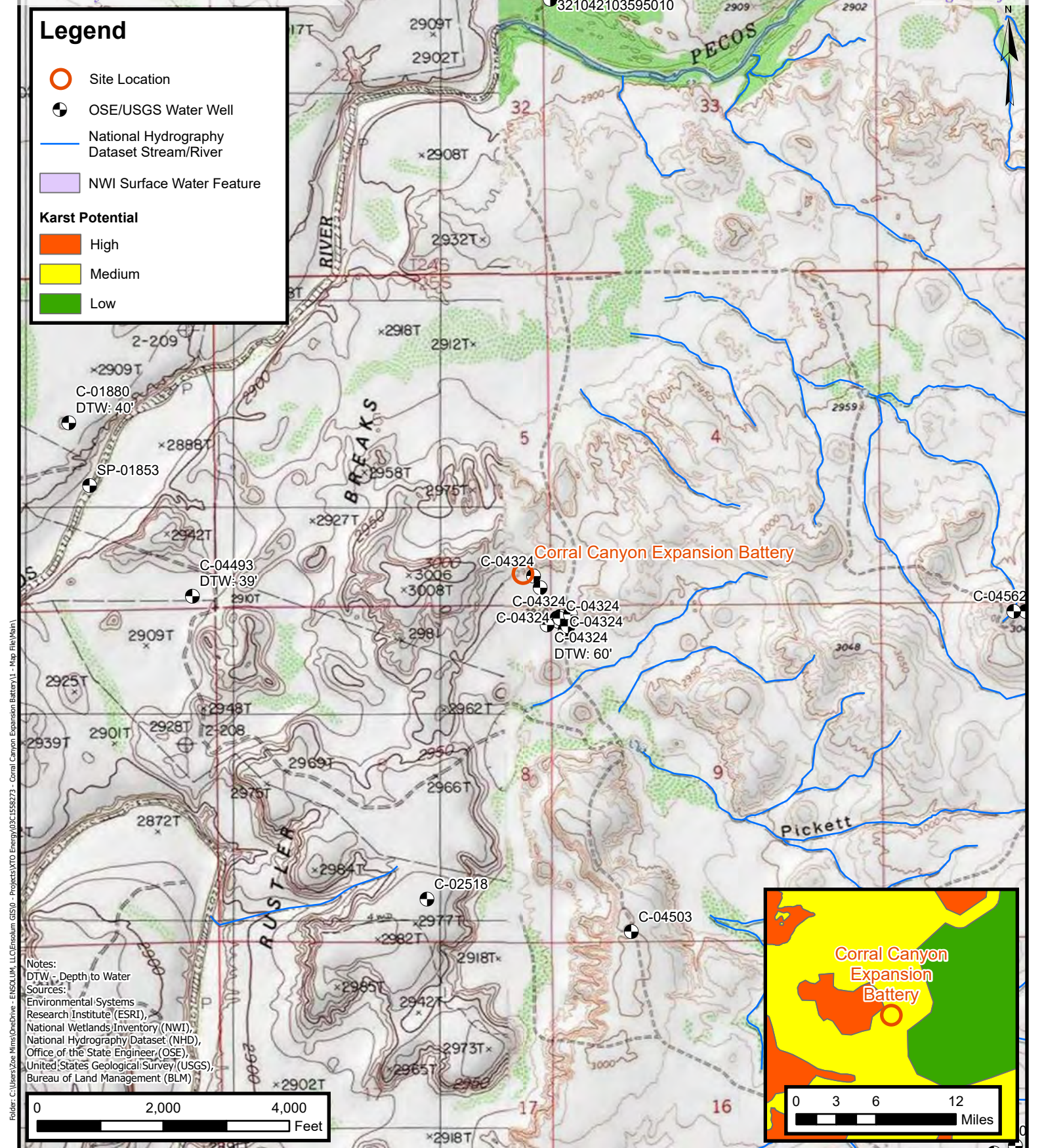
cc: Garrett Green, XTO
Tommee Lambert, XTO
Bureau of Land Management

Appendices:

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



FIGURES



Site Receptor Map

XTO Energy, Inc
 Corral Canyon Expansion Battery
 Incident Number: nAPP2322648859
 Unit P, Sec 5, T25S, R29E
 Eddy County, New Mexico

FIGURE

1



Delineation Soil Sample Locations

XTO Energy, Inc
Corral Canyon Expansion Battery
Incident Number: nAPP2322648859
Unit P, Sec 5, T25S, R29E
Eddy County, New Mexico

FIGURE
2



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Corral Canyon Expansion Battery
XTO Energy, Inc
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Delineation Soil Samples										
SS01	09/25/2023	0.5	<0.00200	<0.00401	<50.5	<50.5	<50.5	<50.5	<50.5	2,360
PH01	10/05/2023	1'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	378
SS02	09/25/2023	0.5	<0.00202	<0.00403	<49.6	<49.6	<49.6	<49.6	<49.6	40.5
PH02	10/05/2023	1'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	291
BH01	10/05/2023	0.5	<0.00201	<0.00402	<50.1	<50.1	<50.1	<50.1	<50.1	72.7
BH01A	10/05/2023	1'	<0.00199	<0.00398	<50.2	<50.2	<50.2	<50.2	<50.2	105
SS03	09/25/2023	0.5	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	192
SS04	09/25/2023	0.5	<0.00200	<0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	334
SS05	09/25/2023	0.5	<0.00201	<0.00402	<50.4	<50.4	<50.4	<50.4	<50.4	538
SS06	09/25/2023	0.5	<0.00202	<0.00404	<50.5	<50.5	<50.5	<50.5	<50.5	143

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

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon
NMAC: New Mexico Administrative Code
Grey text indicates soil sample removed during excavation activities



APPENDIX A

Referenced Well Records

**WELL RECORD & LOG****OFFICE OF THE STATE ENGINEER**www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 8 (MW02)		WELL TAG ID NO.		OSE FILE NO(S) C-4324	
	WELL OWNER NAME(S) XTO Energy, Inc.				PHONE (OPTIONAL) 432-221-7331	
	WELL OWNER MAILING ADDRESS 522 W Mermond, Suite 704				CITY STATE ZIP Carlsbad NM 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 9	SECONDS 10.01 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
		LONGITUDE 103		59		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE South East Quarter of South East Quarter of Section 5, Township 25 South, Range 29 East, Eddy County, New Mexico						

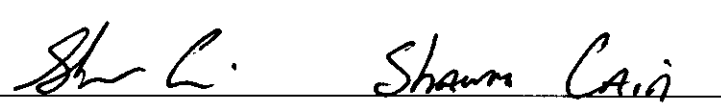
2. DRILLING & CASING INFORMATION	LICENSE NO. 1664		NAME OF LICENSED DRILLER Shawn Cain		NAME OF WELL DRILLING COMPANY Cascade Drilling					
	DRILLING STARTED 7/21/2019		DRILLING ENDED 7/21/2019		DEPTH OF COMPLETED WELL (FT) 69		BORE HOLE DEPTH (FT) 70		DEPTH WATER FIRST ENCOUNTERED (FT) 65	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 60				
	DRILLING FLUID: <input checked="" 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: Sonic									
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)		
	0 70		6							
	0 49			2" PVC Blank	Flush Thread SCH 40	2.067	.154			
	49 69			2" PVC Screen	Flush Thread SCH 40	2.067	.154	.020		

3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	0 2		6	Concrete	.5	Poured
	2 47		6	Bentonite Chips	8	Poured
	47 70		6	12-20 Sand	4	Poured

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. C-4324	POD NO. 8	TRN NO. 154446
LOCATION 25S.29E.5.444		WELL TAG ID NO.
		PAGE 1 OF 2

	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				
4. HYDROGEOLOGIC LOG OF WELL	0	14	14	(SP-SM) - brown-light brown silty SAND	Y ✓ N	
	14	24	10	(CLCHE) - tan CALICHE	Y ✓ N	
	24	49	25	(ML) - light brown-red SILT	Y ✓ N	
	49	51	2	(CLCHE) - tan-light brown CALICHE	Y ✓ N	
	51	60	9	(SP) - tan-light brown SAND	Y ✓ N	
	60	70	10	(CH) - red-brown silty CLAY	✓ 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: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION:					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:					
6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.					
					8-23-19	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME				DATE	

FOR USE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/2019)

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



APPENDIX B

Photographic Log



Photographic Log

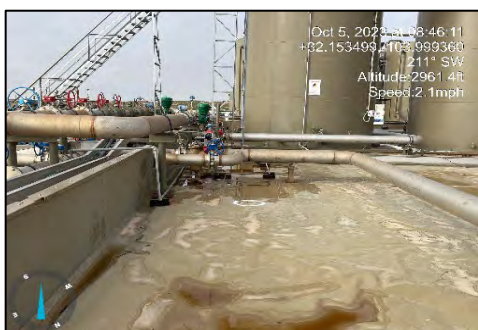
XTO Energy, Inc.

Corral Canyon Expansion Battery
 Incident Number NAPP2322648859



Photograph: 1 Date: 9/25/2023
 Description: Inspection of pump containment
 View: Northwest

Photograph: 2 Date: 9/25/2023
 Description: Inspection of tank battery containment
 View: Southwest




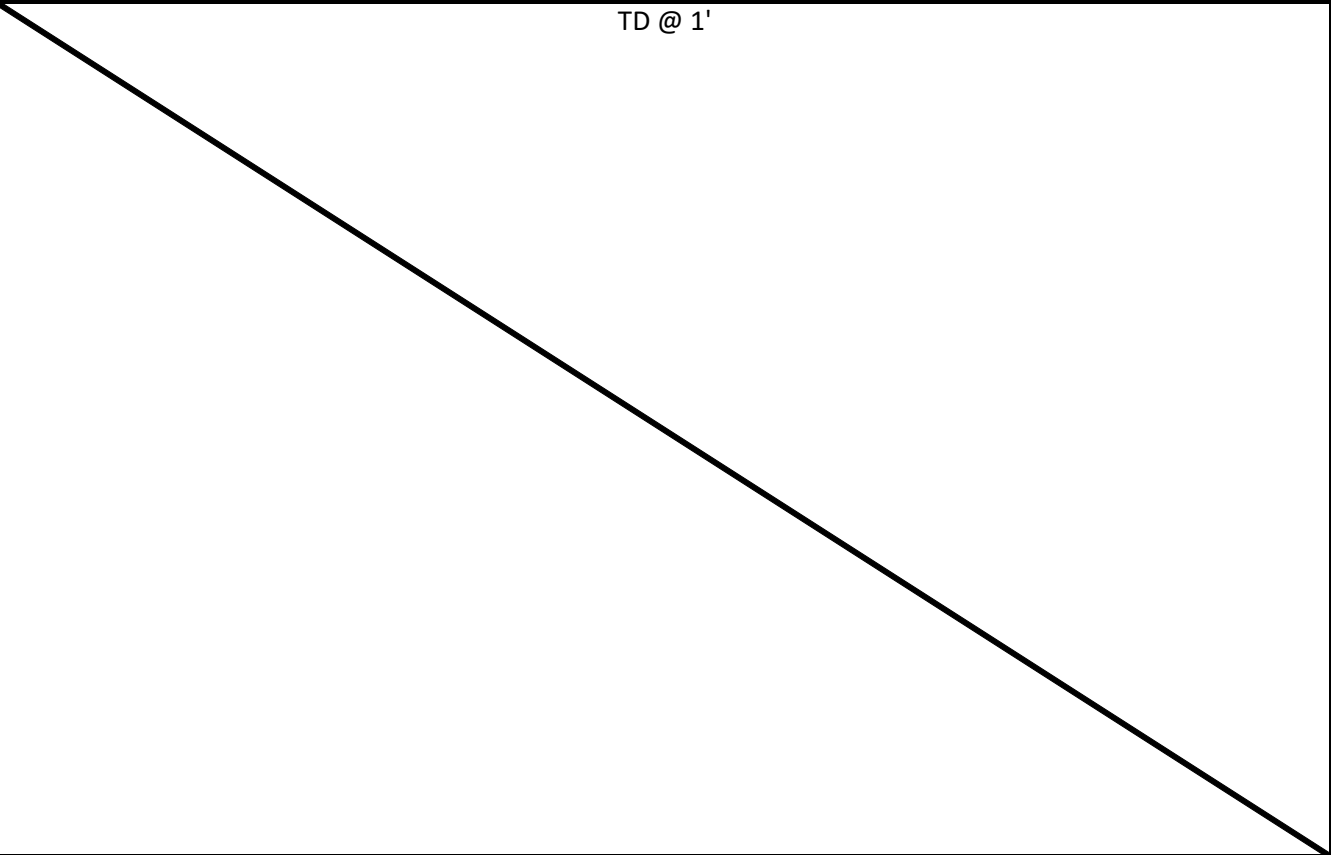
Photograph: 3 Date: 10/5/2023
 Description: Liner delineation activities
 View: Southwest


Photograph: 4 Date: 10/5/2023
 Description: Delineation activities
 View: Southwest


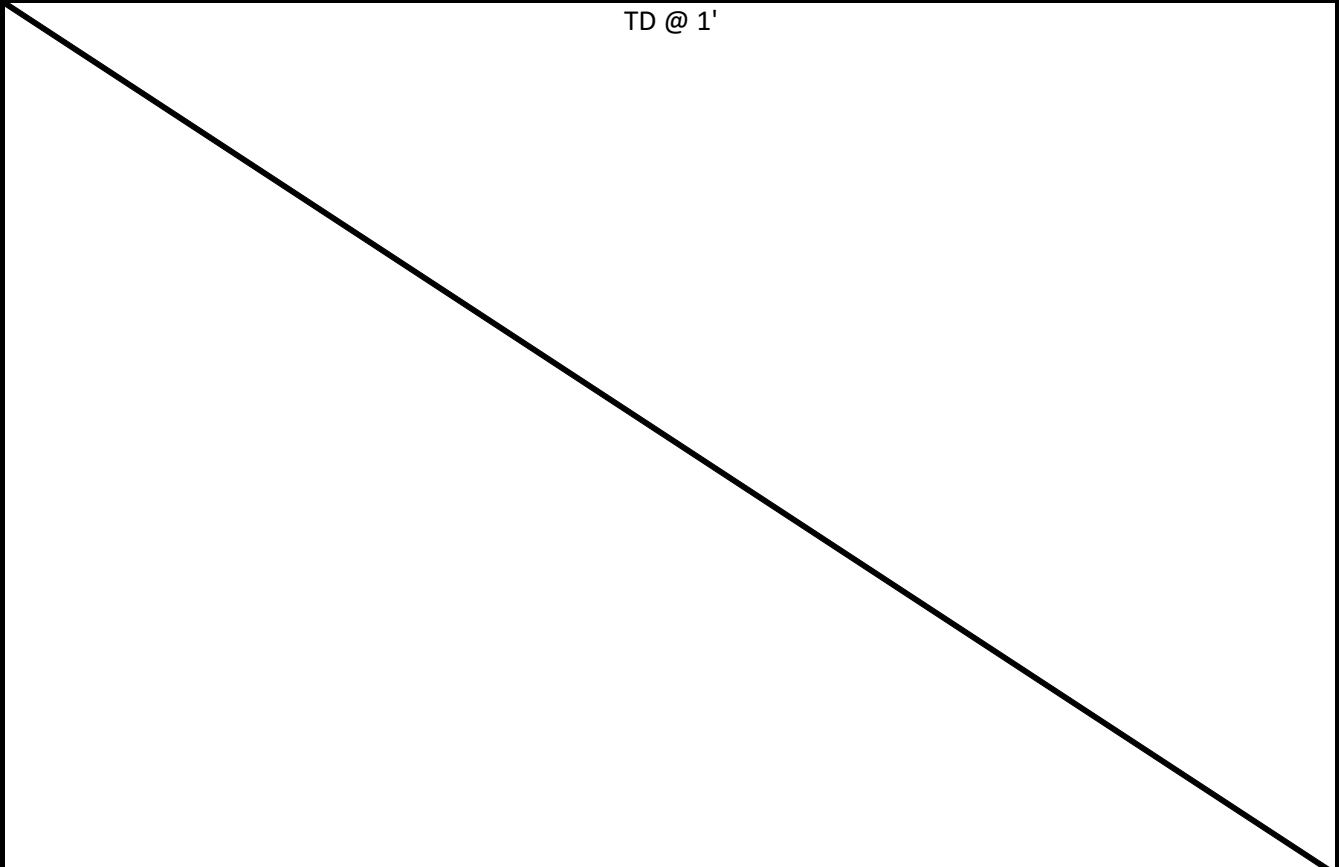


APPENDIX C

Lithologic Soil Sampling Logs

								Sample Name: BH01		Date: 10/5/2023	
								Site Name: Corral Canyon Expansion Battery			
								Incident Number: nAPP2322648859			
								Job Number: 03C1558273			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: MR		Method: Hand Auger	
Coordinates: 32.153466, -103.999362								Hole Diameter: 3"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
	<162.4	0.4	N	BH01	0.5	0.5		CCHE. Pad material			
	<162.4	0.5	N	BH01A	1	1		CCHE. Pad material			
TD @ 1'											
											

 ENSOLUM					Sample Name: SS01/PH01		Date: 10/5/2023	
					Site Name: Corral Canyon Expansion Battery			
					Incident Number: nAPP2322648859			
					Job Number: 03C1558273			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: MR		Method: Backhoe	
Coordinates: 32.153488, -103.999239					Hole Diameter: 2'		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
	2,609	0.0	N	SS01	0.5	0.5		CCHE. Pad material
	263.2	0.3	N	PH01	1	1		CCHE. Pad material
TD @ 1'								

 ENSOLUM					Sample Name: SS02/PH02		Date: 10/5/2023	
					Site Name: Corral Canyon Expansion Battery			
					Incident Number: nAPP2322648859			
					Job Number: 03C1558273			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: MR		Method: Backhoe	
Coordinates: 32.153303, -103.999119					Hole Diameter: 2'		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
	<168	0.0	N	SS02	0.5	0.5		CCHE. Pad material
	229.6	0.3	N	PH02	1	1		CCHE. Pad material
TD @ 1'								
								



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/2/2023 4:11:53 PM

JOB DESCRIPTION

Corral Canyon Expansion Battery
SDG NUMBER 03C1558273

JOB NUMBER

890-5337-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

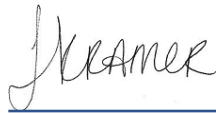
Eurofins Carlsbad

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
10/2/2023 4:11:53 PM

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

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Laboratory Job ID: 890-5337-1
SDG: 03C1558273

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Definitions/Glossary

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Job ID: 890-5337-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-5337-1

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 9/25/2023 1:53 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-5337-1), SS02 (890-5337-2), SS03 (890-5337-3), SS04 (890-5337-4), SS05 (890-5337-5) and SS06 (890-5337-6).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63329 and 880-63562 and analytical batch 880-63583 was outside the upper control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-63583 recovered under the lower control limit for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.>(CCV 880-63583/113)

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SS02 (890-5337-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-63371/20), (CCV 880-63371/5) and (LCS 880-63419/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-63419 and analytical batch 880-63371 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.

Client Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5337-1
SDG: 03C1558273

Client Sample ID: SS01

Lab Sample ID: 890-5337-1

Date Collected: 09/25/23 10:40

Matrix: Solid

Date Received: 09/25/23 13:53

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		09/26/23 11:47	10/01/23 02:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	10/01/23 02:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	10/01/23 02:05	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/26/23 11:47	10/01/23 02:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	10/01/23 02:05	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/26/23 11:47	10/01/23 02:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	09/26/23 11:47	10/01/23 02:05	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/26/23 11:47	10/01/23 02:05	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			10/01/23 02:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			09/27/23 11:58	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	<50.5	U F1	50.5	mg/Kg		09/27/23 11:12	09/27/23 11:58	1
Diesel Range Organics (Over C10-C28)	<50.5	U F1	50.5	mg/Kg		09/27/23 11:12	09/27/23 11:58	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		09/27/23 11:12	09/27/23 11:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	09/27/23 11:12	09/27/23 11:58	1
o-Terphenyl	78		70 - 130	09/27/23 11:12	09/27/23 11:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2360		25.1	mg/Kg			09/28/23 11:36	5

Client Sample ID: SS02

Lab Sample ID: 890-5337-2

Date Collected: 09/25/23 10:45

Matrix: Solid

Date Received: 09/25/23 13:53

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		09/26/23 11:47	10/01/23 02:26	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/26/23 11:47	10/01/23 02:26	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/26/23 11:47	10/01/23 02:26	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/26/23 11:47	10/01/23 02:26	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/26/23 11:47	10/01/23 02:26	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/26/23 11:47	10/01/23 02:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	09/26/23 11:47	10/01/23 02:26	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Client Sample ID: SS02

Lab Sample ID: 890-5337-2

Date Collected: 09/25/23 10:45

Matrix: Solid

Date Received: 09/25/23 13:53

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	09/26/23 11:47	10/01/23 02:26	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			10/01/23 02:26	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			09/27/23 13:08	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		09/27/23 11:12	09/27/23 13:08	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		09/27/23 11:12	09/27/23 13:08	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		09/27/23 11:12	09/27/23 13:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130			09/27/23 11:12	09/27/23 13:08	1
o-Terphenyl	67	S1-	70 - 130			09/27/23 11:12	09/27/23 13:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.5		4.98	mg/Kg			09/28/23 11:42	1

Client Sample ID: SS03

Lab Sample ID: 890-5337-3

Date Collected: 09/25/23 10:50

Matrix: Solid

Date Received: 09/25/23 13:53

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		09/26/23 11:47	10/01/23 04:15	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/26/23 11:47	10/01/23 04:15	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/26/23 11:47	10/01/23 04:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/26/23 11:47	10/01/23 04:15	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/26/23 11:47	10/01/23 04:15	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/26/23 11:47	10/01/23 04:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	09/26/23 11:47	10/01/23 04:15	1
1,4-Difluorobenzene (Surr)	105		70 - 130	09/26/23 11:47	10/01/23 04:15	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			10/01/23 04:15	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			09/27/23 13:32	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Client Sample ID: SS03

Lab Sample ID: 890-5337-3

Date Collected: 09/25/23 10:50

Matrix: Solid

Date Received: 09/25/23 13:53

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		09/27/23 11:12	09/27/23 13:32	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		09/27/23 11:12	09/27/23 13:32	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		09/27/23 11:12	09/27/23 13:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			09/27/23 11:12	09/27/23 13:32	1
o-Terphenyl	94		70 - 130			09/27/23 11:12	09/27/23 13:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	192		5.03	mg/Kg			09/28/23 11:48	1

Client Sample ID: SS04

Lab Sample ID: 890-5337-4

Date Collected: 09/25/23 10:55

Matrix: Solid

Date Received: 09/25/23 13:53

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		09/26/23 11:47	10/01/23 04:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	10/01/23 04:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	10/01/23 04:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/26/23 11:47	10/01/23 04:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	10/01/23 04:36	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/26/23 11:47	10/01/23 04:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130			09/26/23 11:47	10/01/23 04:36	1
1,4-Difluorobenzene (Surr)	107		70 - 130			09/26/23 11:47	10/01/23 04:36	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			10/01/23 04:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			09/27/23 13:56	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	<50.3	U	50.3	mg/Kg		09/27/23 11:12	09/27/23 13:56	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		09/27/23 11:12	09/27/23 13:56	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		09/27/23 11:12	09/27/23 13:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			09/27/23 11:12	09/27/23 13:56	1
o-Terphenyl	88		70 - 130			09/27/23 11:12	09/27/23 13:56	1

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Client Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Client Sample ID: SS04

Lab Sample ID: 890-5337-4

Date Collected: 09/25/23 10:55

Matrix: Solid

Date Received: 09/25/23 13:53

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	334		25.2	mg/Kg			09/28/23 12:05	5

Client Sample ID: SS05

Lab Sample ID: 890-5337-5

Date Collected: 09/25/23 11:00

Matrix: Solid

Date Received: 09/25/23 13:53

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		09/26/23 11:47	10/01/23 04:56	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/26/23 11:47	10/01/23 04:56	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/26/23 11:47	10/01/23 04:56	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/26/23 11:47	10/01/23 04:56	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/26/23 11:47	10/01/23 04:56	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/26/23 11:47	10/01/23 04:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			09/26/23 11:47	10/01/23 04:56	1
1,4-Difluorobenzene (Surr)	107		70 - 130			09/26/23 11:47	10/01/23 04:56	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			10/01/23 04:56	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			09/27/23 14:21	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	<50.4	U	50.4	mg/Kg		09/27/23 11:12	09/27/23 14:21	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		09/27/23 11:12	09/27/23 14:21	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		09/27/23 11:12	09/27/23 14:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			09/27/23 11:12	09/27/23 14:21	1
o-Terphenyl	89		70 - 130			09/27/23 11:12	09/27/23 14:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	538		4.96	mg/Kg			09/28/23 12:11	1

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Client Sample Results

Client: Ensolum
 Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
 SDG: 03C1558273

Client Sample ID: SS06

Lab Sample ID: 890-5337-6

Date Collected: 09/25/23 11:05

Matrix: Solid

Date Received: 09/25/23 13:53

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	-	09/26/23 11:47	10/01/23 05:17	1
Toluene	<0.00202	U	0.00202	mg/Kg	-	09/26/23 11:47	10/01/23 05:17	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg	-	09/26/23 11:47	10/01/23 05:17	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg	-	09/26/23 11:47	10/01/23 05:17	1
o-Xylene	<0.00202	U	0.00202	mg/Kg	-	09/26/23 11:47	10/01/23 05:17	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg	-	09/26/23 11:47	10/01/23 05:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/26/23 11:47	10/01/23 05:17	1
1,4-Difluorobenzene (Surr)	109		70 - 130	09/26/23 11:47	10/01/23 05:17	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	-		10/01/23 05:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg	-		09/27/23 14:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg	-	09/27/23 11:12	09/27/23 14:45	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg	-	09/27/23 11:12	09/27/23 14:45	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg	-	09/27/23 11:12	09/27/23 14:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	09/27/23 11:12	09/27/23 14:45	1
o-Terphenyl	84		70 - 130	09/27/23 11:12	09/27/23 14:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	143		4.97	mg/Kg	-		09/28/23 12:28	1

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Surrogate Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

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)
880-33598-A-1-C MS	Matrix Spike	107	103
880-33598-A-1-D MSD	Matrix Spike Duplicate	103	106
890-5337-1	SS01	95	101
890-5337-2	SS02	93	109
890-5337-3	SS03	78	105
890-5337-4	SS04	82	107
890-5337-5	SS05	90	107
890-5337-6	SS06	100	109
LCS 880-63329/1-A	Lab Control Sample	103	103
LCSD 880-63329/2-A	Lab Control Sample Dup	101	102
MB 880-63329/5-A	Method Blank	123	144 S1+
MB 880-63562/5-A	Method Blank	117	142 S1+
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-5337-1	SS01	83	78
890-5337-1 MS	SS01	85	79
890-5337-1 MSD	SS01	86	81
890-5337-2	SS02	68 S1-	67 S1-
890-5337-3	SS03	96	94
890-5337-4	SS04	91	88
890-5337-5	SS05	93	89
890-5337-6	SS06	90	84
LCS 880-63419/2-A	Lab Control Sample	138 S1+	149 S1+
LCSD 880-63419/3-A	Lab Control Sample Dup	96	98
MB 880-63419/1-A - IN3	Method Blank	91	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63329/5-A

Matrix: Solid

Analysis Batch: 63583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63329

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	09/30/23 22:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	09/30/23 22:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	09/30/23 22:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/26/23 11:47	09/30/23 22:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/26/23 11:47	09/30/23 22:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/26/23 11:47	09/30/23 22:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	09/26/23 11:47	09/30/23 22:53	1
1,4-Difluorobenzene (Surr)	144	S1+	70 - 130	09/26/23 11:47	09/30/23 22:53	1

Lab Sample ID: LCS 880-63329/1-A

Matrix: Solid

Analysis Batch: 63583

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63329

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09496		mg/Kg		95	70 - 130
Toluene	0.100	0.08562		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.08728		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1933		mg/Kg		97	70 - 130
o-Xylene	0.100	0.08990		mg/Kg		90	70 - 130

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

Lab Sample ID: LCSD 880-63329/2-A

Matrix: Solid

Analysis Batch: 63583

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 63329

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1020		mg/Kg		102	70 - 130	7	35
Toluene	0.100	0.09114		mg/Kg		91	70 - 130	6	35
Ethylbenzene	0.100	0.09396		mg/Kg		94	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2072		mg/Kg		104	70 - 130	7	35
o-Xylene	0.100	0.09677		mg/Kg		97	70 - 130	7	35

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

Lab Sample ID: 880-33598-A-1-C MS

Matrix: Solid

Analysis Batch: 63583

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 63329

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.09262		mg/Kg		93	70 - 130
Toluene	<0.00199	U	0.0998	0.08525		mg/Kg		85	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5337-1
SDG: 03C1558273

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

Lab Sample ID: 880-33598-A-1-C MS

Matrix: Solid

Analysis Batch: 63583

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 63329

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.08089		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1860		mg/Kg		93	70 - 130
o-Xylene	<0.00199	U	0.0998	0.08966		mg/Kg		90	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-33598-A-1-D MSD

Matrix: Solid

Analysis Batch: 63583

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 63329

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.1018		mg/Kg		103	70 - 130	9	35
Toluene	<0.00199	U	0.0990	0.08439		mg/Kg		85	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.0990	0.08888		mg/Kg		90	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1999		mg/Kg		101	70 - 130	7	35
o-Xylene	<0.00199	U	0.0990	0.09272		mg/Kg		94	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: MB 880-63562/5-A

Matrix: Solid

Analysis Batch: 63583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63562

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/28/23 17:46	09/30/23 11:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/28/23 17:46	09/30/23 11:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/28/23 17:46	09/30/23 11:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/28/23 17:46	09/30/23 11:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/28/23 17:46	09/30/23 11:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/28/23 17:46	09/30/23 11:17	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	09/28/23 17:46	09/30/23 11:17	1
1,4-Difluorobenzene (Surr)	142	S1+	70 - 130	09/28/23 17:46	09/30/23 11:17	1

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

Lab Sample ID: LCS 880-63419/2-A

Matrix: Solid

Analysis Batch: 63371

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	880.6		mg/Kg		88	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

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

Lab Sample ID: LCS 880-63419/2-A

Matrix: Solid

Analysis Batch: 63371

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	945.5		mg/Kg		95	70 - 130
		LCS %Recovery	LCS Qualifier	Limits			
Surrogate							
1-Chlorooctane		138	S1+	70 - 130			
o-Terphenyl		149	S1+	70 - 130			

Lab Sample ID: LCSD 880-63419/3-A

Matrix: Solid

Analysis Batch: 63371

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 63419

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	874.2		mg/Kg		87	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	992.8		mg/Kg		99	70 - 130	5	20
		LCSD %Recovery	LCSD Qualifier	Limits					
Surrogate									
1-Chlorooctane		96		70 - 130					
o-Terphenyl		98		70 - 130					

Lab Sample ID: 890-5337-1 MS

Matrix: Solid

Analysis Batch: 63371

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 63419

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 F1	997	637.3	F1	mg/Kg		61	70 - 130
Diesel Range Organics (Over C10-C28)	<50.5	U F1	997	621.0	F1	mg/Kg		58	70 - 130
		MS %Recovery	MS Qualifier	Limits					
Surrogate									
1-Chlorooctane		85		70 - 130					
o-Terphenyl		79		70 - 130					

Lab Sample ID: 890-5337-1 MSD

Matrix: Solid

Analysis Batch: 63371

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 63419

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 F1	997	641.1	F1	mg/Kg		62	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.5	U F1	997	630.3	F1	mg/Kg		59	70 - 130	1	20
		MSD %Recovery	MSD Qualifier	Limits							
Surrogate											
1-Chlorooctane		86		70 - 130							
o-Terphenyl		81		70 - 130							

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QC Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Method: 8015B NM - Diesel Range Organics (DRO) (GC) - IN3

Lab Sample ID: MB 880-63419/1-A

Matrix: Solid

Analysis Batch: 63371

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63419

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10 - IN3	<50.0	U	50.0	mg/Kg		09/27/23 08:00	09/27/23 08:17	1
Diesel Range Organics (Over C10-C28) - IN3	<50.0	U	50.0	mg/Kg		09/27/23 08:00	09/27/23 08:17	1
Oil Range Organics (Over C28-C36) - IN3	<50.0	U	50.0	mg/Kg		09/27/23 08:00	09/27/23 08:17	1
Surrogate	MB	MB	Limits	Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
1-Chlorooctane - IN3	91		70 - 130			09/27/23 08:00	09/27/23 08:17	1
o-Terphenyl - IN3	94		70 - 130			09/27/23 08:00	09/27/23 08:17	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63385/1-A

Matrix: Solid

Analysis Batch: 63477

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			09/28/23 08:40	1

Lab Sample ID: LCS 880-63385/2-A

Matrix: Solid

Analysis Batch: 63477

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	251.9		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-63385/3-A

Matrix: Solid

Analysis Batch: 63477

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	251.9		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-5337-3 MS

Matrix: Solid

Analysis Batch: 63477

Client Sample ID: SS03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	192		252	418.6		mg/Kg		90	90 - 110

Lab Sample ID: 890-5337-3 MSD

Matrix: Solid

Analysis Batch: 63477

Client Sample ID: SS03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	192		252	417.9		mg/Kg		90	90 - 110	0	20

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5337-1
SDG: 03C1558273

GC VOA

Prep Batch: 63329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-1	SS01	Total/NA	Solid	5035	
890-5337-2	SS02	Total/NA	Solid	5035	
890-5337-3	SS03	Total/NA	Solid	5035	
890-5337-4	SS04	Total/NA	Solid	5035	
890-5337-5	SS05	Total/NA	Solid	5035	
890-5337-6	SS06	Total/NA	Solid	5035	
MB 880-63329/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63329/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63329/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-33598-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-33598-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 63562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-63562/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 63583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-1	SS01	Total/NA	Solid	8021B	63329
890-5337-2	SS02	Total/NA	Solid	8021B	63329
890-5337-3	SS03	Total/NA	Solid	8021B	63329
890-5337-4	SS04	Total/NA	Solid	8021B	63329
890-5337-5	SS05	Total/NA	Solid	8021B	63329
890-5337-6	SS06	Total/NA	Solid	8021B	63329
MB 880-63329/5-A	Method Blank	Total/NA	Solid	8021B	63329
MB 880-63562/5-A	Method Blank	Total/NA	Solid	8021B	63562
LCS 880-63329/1-A	Lab Control Sample	Total/NA	Solid	8021B	63329
LCSD 880-63329/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63329
880-33598-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	63329
880-33598-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63329

Analysis Batch: 63790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-1	SS01	Total/NA	Solid	Total BTEX	
890-5337-2	SS02	Total/NA	Solid	Total BTEX	
890-5337-3	SS03	Total/NA	Solid	Total BTEX	
890-5337-4	SS04	Total/NA	Solid	Total BTEX	
890-5337-5	SS05	Total/NA	Solid	Total BTEX	
890-5337-6	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 63371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-1	SS01	Total/NA	Solid	8015B NM	63419
890-5337-2	SS02	Total/NA	Solid	8015B NM	63419
890-5337-3	SS03	Total/NA	Solid	8015B NM	63419
890-5337-4	SS04	Total/NA	Solid	8015B NM	63419
890-5337-5	SS05	Total/NA	Solid	8015B NM	63419
890-5337-6	SS06	Total/NA	Solid	8015B NM	63419
MB 880-63419/1-A - IN3	Method Blank	Total/NA	Solid	8015B NM	63419

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QC Association Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

GC Semi VOA (Continued)

Analysis Batch: 63371 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-63419/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63419
LCSD 880-63419/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63419
890-5337-1 MS	SS01	Total/NA	Solid	8015B NM	63419
890-5337-1 MSD	SS01	Total/NA	Solid	8015B NM	63419

Prep Batch: 63419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-1	SS01	Total/NA	Solid	8015NM Prep	
890-5337-2	SS02	Total/NA	Solid	8015NM Prep	
890-5337-3	SS03	Total/NA	Solid	8015NM Prep	
890-5337-4	SS04	Total/NA	Solid	8015NM Prep	
890-5337-5	SS05	Total/NA	Solid	8015NM Prep	
890-5337-6	SS06	Total/NA	Solid	8015NM Prep	
MB 880-63419/1-A - IN3	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63419/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63419/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5337-1 MS	SS01	Total/NA	Solid	8015NM Prep	
890-5337-1 MSD	SS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 63520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-1	SS01	Total/NA	Solid	8015 NM	
890-5337-2	SS02	Total/NA	Solid	8015 NM	
890-5337-3	SS03	Total/NA	Solid	8015 NM	
890-5337-4	SS04	Total/NA	Solid	8015 NM	
890-5337-5	SS05	Total/NA	Solid	8015 NM	
890-5337-6	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 63385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-1	SS01	Soluble	Solid	DI Leach	
890-5337-2	SS02	Soluble	Solid	DI Leach	
890-5337-3	SS03	Soluble	Solid	DI Leach	
890-5337-4	SS04	Soluble	Solid	DI Leach	
890-5337-5	SS05	Soluble	Solid	DI Leach	
890-5337-6	SS06	Soluble	Solid	DI Leach	
MB 880-63385/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63385/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63385/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5337-3 MS	SS03	Soluble	Solid	DI Leach	
890-5337-3 MSD	SS03	Soluble	Solid	DI Leach	

Analysis Batch: 63477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-1	SS01	Soluble	Solid	300.0	63385
890-5337-2	SS02	Soluble	Solid	300.0	63385
890-5337-3	SS03	Soluble	Solid	300.0	63385
890-5337-4	SS04	Soluble	Solid	300.0	63385
890-5337-5	SS05	Soluble	Solid	300.0	63385

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

HPLC/IC (Continued)

Analysis Batch: 63477 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5337-6	SS06	Soluble	Solid	300.0	63385
MB 880-63385/1-A	Method Blank	Soluble	Solid	300.0	63385
LCS 880-63385/2-A	Lab Control Sample	Soluble	Solid	300.0	63385
LCSD 880-63385/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63385
890-5337-3 MS	SS03	Soluble	Solid	300.0	63385
890-5337-3 MSD	SS03	Soluble	Solid	300.0	63385

Lab Chronicle

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Client Sample ID: SS01

Lab Sample ID: 890-5337-1

Date Collected: 09/25/23 10:40

Matrix: Solid

Date Received: 09/25/23 13:53

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	63329	09/26/23 11:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63583	10/01/23 02:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63790	10/01/23 02:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			63520	09/27/23 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	63419	09/27/23 11:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63371	09/27/23 11:58	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	63385	09/27/23 09:50	AG	EET MID
Soluble	Analysis	300.0		5			63477	09/28/23 11:36	CH	EET MID

Client Sample ID: SS02

Lab Sample ID: 890-5337-2

Date Collected: 09/25/23 10:45

Matrix: Solid

Date Received: 09/25/23 13:53

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	63329	09/26/23 11:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63583	10/01/23 02:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63790	10/01/23 02:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			63520	09/27/23 13:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	63419	09/27/23 11:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63371	09/27/23 13:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63385	09/27/23 09:50	AG	EET MID
Soluble	Analysis	300.0		1			63477	09/28/23 11:42	CH	EET MID

Client Sample ID: SS03

Lab Sample ID: 890-5337-3

Date Collected: 09/25/23 10:50

Matrix: Solid

Date Received: 09/25/23 13:53

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	63329	09/26/23 11:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63583	10/01/23 04:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63790	10/01/23 04:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			63520	09/27/23 13:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	63419	09/27/23 11:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63371	09/27/23 13:32	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	63385	09/27/23 09:50	AG	EET MID
Soluble	Analysis	300.0		1			63477	09/28/23 11:48	CH	EET MID

Client Sample ID: SS04

Lab Sample ID: 890-5337-4

Date Collected: 09/25/23 10:55

Matrix: Solid

Date Received: 09/25/23 13:53

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	63329	09/26/23 11:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63583	10/01/23 04:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63790	10/01/23 04:36	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Client Sample ID: SS04

Lab Sample ID: 890-5337-4

Date Collected: 09/25/23 10:55

Matrix: Solid

Date Received: 09/25/23 13:53

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			63520	09/27/23 13:56	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63419	09/27/23 11:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63371	09/27/23 13:56	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63385	09/27/23 09:50	AG	EET MID
Soluble	Analysis	300.0		5			63477	09/28/23 12:05	CH	EET MID

Client Sample ID: SS05

Lab Sample ID: 890-5337-5

Date Collected: 09/25/23 11:00

Matrix: Solid

Date Received: 09/25/23 13:53

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	63329	09/26/23 11:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63583	10/01/23 04:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63790	10/01/23 04:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			63520	09/27/23 14:21	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	63419	09/27/23 11:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63371	09/27/23 14:21	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	63385	09/27/23 09:50	AG	EET MID
Soluble	Analysis	300.0		1			63477	09/28/23 12:11	CH	EET MID

Client Sample ID: SS06

Lab Sample ID: 890-5337-6

Date Collected: 09/25/23 11:05

Matrix: Solid

Date Received: 09/25/23 13:53

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	63329	09/26/23 11:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63583	10/01/23 05:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63790	10/01/23 05:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			63520	09/27/23 14:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	63419	09/27/23 11:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63371	09/27/23 14:45	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63385	09/27/23 09:50	AG	EET MID
Soluble	Analysis	300.0		1			63477	09/28/23 12:28	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

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

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

Method Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

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 Expansion Battery

Job ID: 890-5337-1
SDG: 03C1558273

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5337-1	SS01	Solid	09/25/23 10:40	09/25/23 13:53	0.5
890-5337-2	SS02	Solid	09/25/23 10:45	09/25/23 13:53	0.5
890-5337-3	SS03	Solid	09/25/23 10:50	09/25/23 13:53	0.5
890-5337-4	SS04	Solid	09/25/23 10:55	09/25/23 13:53	0.5
890-5337-5	SS05	Solid	09/25/23 11:00	09/25/23 13:53	0.5
890-5337-6	SS06	Solid	09/25/23 11:05	09/25/23 13:53	0.5

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



Environment Testing
Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager:	Ben Bellil	Bill to: (if different)	Garrett Green
Company Name:	Ensolum	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Green St.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-887-2946	Email:	Garrett.Green@XxonMobil.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: _____

Project Name:	Corral Canyon Expansion Battery	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST		Preservative Codes
Project Number:	03C1558273	Due Date:						None: NO DI Water: H ₂ O
Project Location:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm						Cool: Cool MeOH: Me
Sampler's Name:	Connor Whitman							HCL: HC HNO ₃ : HN
PO #:								H ₂ SO ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> No	Thermometer ID: <u>740007</u>	Wet Ice: <input checked="" type="checkbox"/> No					H ₃ PO ₄ : HP
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:						NaHSO ₄ : NABIS
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	<u>4.6</u>					Na ₂ S ₂ O ₃ : NaSO ₃
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Corrected Temperature:	<u>4.4</u>					Zn Acetate+NaOH: Zn
Total Containers:								NaOH+Ascorbic Acid: SACP
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 3000.0)	Sample Comments
	SS01	9/25/2023	10:40	0.5'	Grab/	1	X X X X X	Incident ID: _____
	SS02	9/25/2023	10:45	0.5'	Grab/	1	X X X X X	nAPP2322648859
	SS03	9/25/2023	10:50	0.5'	Grab/	1	X X X X X	
	SS04	9/25/2023	10:55	0.5'	Grab/	1	X X X X X	Cost Center: _____
	SS05	9/25/2023	11:00	0.5'	Grab/	1	X X X X X	2125321001
	SS06	9/25/2023	11:05	0.5'	Grab/	1	X X X X X	AFE: _____

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ 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.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<u>CBH</u>	<u>Garrett</u>	4-25-23 13:52			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5337-1

SDG Number: 03C1558273

Login Number: 5337

List Source: Eurofins Carlsbad

List Number: 1

Creator: Lopez, Abraham

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: 890-5337-1

SDG Number: 03C1558273

Login Number: 5337

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/26/23 10:43 AM

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



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/11/2023 3:17:35 PM Revision 1

JOB DESCRIPTION

Corral Canyon Expansion Battery
SDG NUMBER 03C1558273

JOB NUMBER

890-5415-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

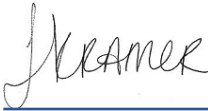
Eurofins Carlsbad

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
(432)704-5440

Generated
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Revision 1

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Laboratory Job ID: 890-5415-1
SDG: 03C1558273

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Definitions/Glossary

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Eurofins Carlsbad

Case Narrative

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

Job ID: 890-5415-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-5415-1

REVISION

The report being provided is a revision of the original report sent on 10/11/2023. The report (revision 1) is being revised due to Per client email, requesting sample depths match per COC.

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 10/5/2023 11:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH01 (890-5415-1), BH01A (890-5415-2), PH01 (890-5415-3) and PH02 (890-5415-4).

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-64292 and analytical batch 880-64326 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

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-5407-A-4-C MS) and (890-5407-A-4-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH01 (890-5415-1), BH01A (890-5415-2) and PH01 (890-5415-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64055 and analytical batch 880-64187 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-64312 and analytical batch 880-64318 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-5415-A-4-D MS) and (890-5415-A-4-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-64318/20), (CCV 880-64318/5)

Case Narrative

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

Job ID: 890-5415-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

and (LCS 880-64312/2-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64133 and analytical batch 880-64315 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.

Client Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5415-1
SDG: 03C1558273

Client Sample ID: BH01

Lab Sample ID: 890-5415-1

Date Collected: 10/05/23 09:40

Matrix: Solid

Date Received: 10/05/23 11:40

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		10/09/23 15:49	10/11/23 05:12	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/09/23 15:49	10/11/23 05:12	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/09/23 15:49	10/11/23 05:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/09/23 15:49	10/11/23 05:12	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/09/23 15:49	10/11/23 05:12	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/09/23 15:49	10/11/23 05:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	10/09/23 15:49	10/11/23 05:12	1
1,4-Difluorobenzene (Surr)	77		70 - 130	10/09/23 15:49	10/11/23 05:12	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			10/11/23 05:12	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			10/09/23 18:56	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	<50.1	U	50.1	mg/Kg		10/06/23 13:53	10/09/23 18:56	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		10/06/23 13:53	10/09/23 18:56	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		10/06/23 13:53	10/09/23 18:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	10/06/23 13:53	10/09/23 18:56	1
o-Terphenyl	141	S1+	70 - 130	10/06/23 13:53	10/09/23 18:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72.7	F1	5.04	mg/Kg			10/09/23 21:39	1

Client Sample ID: BH01A

Lab Sample ID: 890-5415-2

Date Collected: 10/05/23 09:45

Matrix: Solid

Date Received: 10/05/23 11:40

Sample Depth: 1'

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		10/09/23 15:49	10/11/23 05:32	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/09/23 15:49	10/11/23 05:32	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/09/23 15:49	10/11/23 05:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/09/23 15:49	10/11/23 05:32	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/09/23 15:49	10/11/23 05:32	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/09/23 15:49	10/11/23 05:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	10/09/23 15:49	10/11/23 05:32	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5415-1
SDG: 03C1558273

Client Sample ID: BH01A

Lab Sample ID: 890-5415-2

Date Collected: 10/05/23 09:45

Matrix: Solid

Date Received: 10/05/23 11:40

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	71		70 - 130	10/09/23 15:49	10/11/23 05:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/11/23 05:32	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			10/09/23 19:17	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	<50.2	U	50.2	mg/Kg		10/06/23 13:53	10/09/23 19:17	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		10/06/23 13:53	10/09/23 19:17	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		10/06/23 13:53	10/09/23 19:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130			10/06/23 13:53	10/09/23 19:17	1
o-Terphenyl	139	S1+	70 - 130			10/06/23 13:53	10/09/23 19:17	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	105		5.02	mg/Kg			10/09/23 21:59	1

Client Sample ID: PH01

Lab Sample ID: 890-5415-3

Date Collected: 10/05/23 09:50

Matrix: Solid

Date Received: 10/05/23 11:40

Sample Depth: 1'

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		10/09/23 15:49	10/11/23 05:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/09/23 15:49	10/11/23 05:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/09/23 15:49	10/11/23 05:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/09/23 15:49	10/11/23 05:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/09/23 15:49	10/11/23 05:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/09/23 15:49	10/11/23 05:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	10/09/23 15:49	10/11/23 05:53	1
1,4-Difluorobenzene (Surr)	82		70 - 130	10/09/23 15:49	10/11/23 05:53	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			10/11/23 05:53	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			10/09/23 19:39	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5415-1
SDG: 03C1558273

Client Sample ID: PH01

Date Collected: 10/05/23 09:50

Date Received: 10/05/23 11:40

Sample Depth: 1'

Lab Sample ID: 890-5415-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/06/23 13:53	10/09/23 19:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/06/23 13:53	10/09/23 19:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/06/23 13:53	10/09/23 19:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130			10/06/23 13:53	10/09/23 19:39	1
o-Terphenyl	143	S1+	70 - 130			10/06/23 13:53	10/09/23 19:39	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	378		5.03	mg/Kg			10/09/23 22:06	1

Client Sample ID: PH02

Date Collected: 10/05/23 10:00

Date Received: 10/05/23 11:40

Sample Depth: 1'

Lab Sample ID: 890-5415-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:49	10/11/23 06:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:49	10/11/23 06:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:49	10/11/23 06:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/09/23 15:49	10/11/23 06:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:49	10/11/23 06:13	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/09/23 15:49	10/11/23 06:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130			10/09/23 15:49	10/11/23 06:13	1
1,4-Difluorobenzene (Surr)	70		70 - 130			10/09/23 15:49	10/11/23 06:13	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			10/11/23 06:13	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			10/10/23 11:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/09/23 17:26	10/10/23 11:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/09/23 17:26	10/10/23 11:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/09/23 17:26	10/10/23 11:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130			10/09/23 17:26	10/10/23 11:51	1
o-Terphenyl	106		70 - 130			10/09/23 17:26	10/10/23 11:51	1

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Client Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

Client Sample ID: PH02
Date Collected: 10/05/23 10:00
Date Received: 10/05/23 11:40
Sample Depth: 1'

Lab Sample ID: 890-5415-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	291		4.98	mg/Kg			10/09/23 22:26	1	

Surrogate Summary

Client: Ensolum
 Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
 SDG: 03C1558273

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)
880-34170-A-12-B MSD	Matrix Spike Duplicate	88	79
880-34170-A-12-E MS	Matrix Spike	119	100
890-5415-1	BH01	91	77
890-5415-2	BH01A	89	71
890-5415-3	PH01	91	82
890-5415-4	PH02	88	70
LCS 880-64292/1-A	Lab Control Sample	111	114
LCSD 880-64292/2-A	Lab Control Sample Dup	109	120
MB 880-64288/5-A	Method Blank	72	98
MB 880-64292/5-A	Method Blank	73	95
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-5407-A-4-C MS	Matrix Spike	64 S1-	58 S1-
890-5407-A-4-D MSD	Matrix Spike Duplicate	78	69 S1-
890-5415-1	BH01	135 S1+	141 S1+
890-5415-2	BH01A	132 S1+	139 S1+
890-5415-3	PH01	138 S1+	143 S1+
890-5415-4	PH02	124	106
890-5415-4 MS	PH02	161 S1+	128
890-5415-4 MSD	PH02	167 S1+	130
LCS 880-64055/2-A	Lab Control Sample	102	106
LCS 880-64312/2-A	Lab Control Sample	126	135 S1+
LCSD 880-64055/3-A	Lab Control Sample Dup	115	119
LCSD 880-64312/3-A	Lab Control Sample Dup	97	97
MB 880-64055/1-A	Method Blank	76	85
MB 880-64312/1-A	Method Blank	189 S1+	176 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
 Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
 SDG: 03C1558273

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-64288/5-A
 Matrix: Solid
 Analysis Batch: 64326

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 64288

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:31	10/10/23 11:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:31	10/10/23 11:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:31	10/10/23 11:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/09/23 15:31	10/10/23 11:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:31	10/10/23 11:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/09/23 15:31	10/10/23 11:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	10/09/23 15:31	10/10/23 11:32	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/09/23 15:31	10/10/23 11:32	1

Lab Sample ID: MB 880-64292/5-A
 Matrix: Solid
 Analysis Batch: 64326

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 64292

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:49	10/10/23 22:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:49	10/10/23 22:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:49	10/10/23 22:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/09/23 15:49	10/10/23 22:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/09/23 15:49	10/10/23 22:18	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/09/23 15:49	10/10/23 22:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	10/09/23 15:49	10/10/23 22:18	1
1,4-Difluorobenzene (Surr)	95		70 - 130	10/09/23 15:49	10/10/23 22:18	1

Lab Sample ID: LCS 880-64292/1-A
 Matrix: Solid
 Analysis Batch: 64326

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 64292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09988		mg/Kg		100	70 - 130
Toluene	0.100	0.09358		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09549		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.2049		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1060		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: LCSD 880-64292/2-A
 Matrix: Solid
 Analysis Batch: 64326

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 64292

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09770		mg/Kg		98	70 - 130	2	35

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QC Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5415-1
SDG: 03C1558273

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

Lab Sample ID: LCSD 880-64292/2-A

Matrix: Solid

Analysis Batch: 64326

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64292

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.08950		mg/Kg		89	70 - 130	4	35
Ethylbenzene	0.100	0.09121		mg/Kg		91	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1972		mg/Kg		99	70 - 130	4	35
o-Xylene	0.100	0.1010		mg/Kg		101	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

Lab Sample ID: 880-34170-A-12-B MSD

Matrix: Solid

Analysis Batch: 64326

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.100	0.03104	F1 F2	mg/Kg		31	70 - 130	93	35
Toluene	<0.00199	U F1 F2	0.100	0.03978	F1 F2	mg/Kg		40	70 - 130	70	35
Ethylbenzene	<0.00199	U F1 F2	0.100	0.03953	F1 F2	mg/Kg		39	70 - 130	79	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.07679	F1 F2	mg/Kg		38	70 - 130	86	35
o-Xylene	<0.00199	U F1 F2	0.100	0.04067	F1 F2	mg/Kg		41	70 - 130	82	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	79		70 - 130

Lab Sample ID: 880-34170-A-12-E MS

Matrix: Solid

Analysis Batch: 64326

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.0998	0.08509		mg/Kg		85	70 - 130		
Toluene	<0.00199	U F1 F2	0.0998	0.08277		mg/Kg		83	70 - 130		
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.09086		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.1926		mg/Kg		96	70 - 130		
o-Xylene	<0.00199	U F1 F2	0.0998	0.09764		mg/Kg		98	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-64055/1-A

Matrix: Solid

Analysis Batch: 64187

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64055

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		10/05/23 17:18	10/09/23 09:00	1

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QC Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5415-1
SDG: 03C1558273

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

Lab Sample ID: MB 880-64055/1-A

Matrix: Solid

Analysis Batch: 64187

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64055

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/05/23 17:18	10/09/23 09:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/05/23 17:18	10/09/23 09:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			10/05/23 17:18	10/09/23 09:00	1
o-Terphenyl	85		70 - 130			10/05/23 17:18	10/09/23 09:00	1

Lab Sample ID: LCS 880-64055/2-A

Matrix: Solid

Analysis Batch: 64187

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64055

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1196		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	1000	914.2		mg/Kg		91	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	102		70 - 130				
o-Terphenyl	106		70 - 130				

Lab Sample ID: LCSD 880-64055/3-A

Matrix: Solid

Analysis Batch: 64187

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64055

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1033		mg/Kg		103	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	1000	1004		mg/Kg		100	70 - 130	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	115		70 - 130						
o-Terphenyl	119		70 - 130						

Lab Sample ID: 890-5407-A-4-C MS

Matrix: Solid

Analysis Batch: 64187

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 64055

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2	997	768.6		mg/Kg		74	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F1	997	507.9	F1	mg/Kg		46	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	64	S1-	70 - 130						
o-Terphenyl	58	S1-	70 - 130						

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QC Sample Results

Client: Ensolum
 Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
 SDG: 03C1558273

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

Lab Sample ID: 890-5407-A-4-D MSD

Matrix: Solid

Analysis Batch: 64187

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64055

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	<49.6	U F2	997	946.0	F2	mg/Kg		92	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	997	612.0	F1	mg/Kg		57	70 - 130	19	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	78		70 - 130								
o-Terphenyl	69	S1-	70 - 130								

Lab Sample ID: MB 880-64312/1-A

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64312

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		10/09/23 17:24	10/10/23 09:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/09/23 17:24	10/10/23 09:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/09/23 17:24	10/10/23 09:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	189	S1+	70 - 130			10/09/23 17:24	10/10/23 09:17	1
o-Terphenyl	176	S1+	70 - 130			10/09/23 17:24	10/10/23 09:17	1

Lab Sample ID: LCS 880-64312/2-A

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	916.1		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	879.0		mg/Kg		88	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	126		70 - 130						
o-Terphenyl	135	S1+	70 - 130						

Lab Sample ID: LCSD 880-64312/3-A

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64312

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	895.5		mg/Kg		90	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	807.7		mg/Kg		81	70 - 130	8	20

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QC Sample Results

Client: Ensolum
 Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
 SDG: 03C1558273

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

Lab Sample ID: LCSD 880-64312/3-A

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64312

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 890-5415-4 MS

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 64312

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1010	954.9		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	1010	1261		mg/Kg		123	70 - 130		
							</				

Lab Sample ID: 890-5415-4 MSD

Matrix: Solid

Analysis Batch: 64318

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 64312

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1010	1023		mg/Kg		100	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1010	1302		mg/Kg		127	70 - 130	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64133/1-A

Matrix: Solid

Analysis Batch: 64315

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			10/09/23 19:46	1

Lab Sample ID: LCS 880-64133/2-A

Matrix: Solid

Analysis Batch: 64315

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	235.3		mg/Kg		94	90 - 110

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QC Sample Results

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-64133/3-A

Matrix: Solid

Analysis Batch: 64315

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	234.8		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 890-5415-1 MS

Matrix: Solid

Analysis Batch: 64315

Client Sample ID: BH01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	72.7	F1	252	371.9	F1	mg/Kg		119	90 - 110		

Lab Sample ID: 890-5415-1 MSD

Matrix: Solid

Analysis Batch: 64315

Client Sample ID: BH01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	72.7	F1	252	373.2	F1	mg/Kg		119	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5415-1
SDG: 03C1558273

GC VOA

Prep Batch: 64288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-64288/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 64292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-1	BH01	Total/NA	Solid	5035	
890-5415-2	BH01A	Total/NA	Solid	5035	
890-5415-3	PH01	Total/NA	Solid	5035	
890-5415-4	PH02	Total/NA	Solid	5035	
MB 880-64292/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64292/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64292/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34170-A-12-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
880-34170-A-12-E MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 64326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-1	BH01	Total/NA	Solid	8021B	64292
890-5415-2	BH01A	Total/NA	Solid	8021B	64292
890-5415-3	PH01	Total/NA	Solid	8021B	64292
890-5415-4	PH02	Total/NA	Solid	8021B	64292
MB 880-64288/5-A	Method Blank	Total/NA	Solid	8021B	64288
MB 880-64292/5-A	Method Blank	Total/NA	Solid	8021B	64292
LCS 880-64292/1-A	Lab Control Sample	Total/NA	Solid	8021B	64292
LCSD 880-64292/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64292
880-34170-A-12-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64292
880-34170-A-12-E MS	Matrix Spike	Total/NA	Solid	8021B	64292

Analysis Batch: 64493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-1	BH01	Total/NA	Solid	Total BTEX	
890-5415-2	BH01A	Total/NA	Solid	Total BTEX	
890-5415-3	PH01	Total/NA	Solid	Total BTEX	
890-5415-4	PH02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-1	BH01	Total/NA	Solid	8015NM Prep	
890-5415-2	BH01A	Total/NA	Solid	8015NM Prep	
890-5415-3	PH01	Total/NA	Solid	8015NM Prep	
MB 880-64055/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64055/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64055/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5407-A-4-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5407-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-1	BH01	Total/NA	Solid	8015B NM	64055
890-5415-2	BH01A	Total/NA	Solid	8015B NM	64055

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QC Association Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5415-1
SDG: 03C1558273

GC Semi VOA (Continued)

Analysis Batch: 64187 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-3	PH01	Total/NA	Solid	8015B NM	64055
MB 880-64055/1-A	Method Blank	Total/NA	Solid	8015B NM	64055
LCS 880-64055/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64055
LCSD 880-64055/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64055
890-5407-A-4-C MS	Matrix Spike	Total/NA	Solid	8015B NM	64055
890-5407-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64055

Prep Batch: 64312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-4	PH02	Total/NA	Solid	8015NM Prep	
MB 880-64312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5415-4 MS	PH02	Total/NA	Solid	8015NM Prep	
890-5415-4 MSD	PH02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-4	PH02	Total/NA	Solid	8015B NM	64312
MB 880-64312/1-A	Method Blank	Total/NA	Solid	8015B NM	64312
LCS 880-64312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64312
LCSD 880-64312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64312
890-5415-4 MS	PH02	Total/NA	Solid	8015B NM	64312
890-5415-4 MSD	PH02	Total/NA	Solid	8015B NM	64312

Analysis Batch: 64378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-1	BH01	Total/NA	Solid	8015 NM	
890-5415-2	BH01A	Total/NA	Solid	8015 NM	
890-5415-3	PH01	Total/NA	Solid	8015 NM	
890-5415-4	PH02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-1	BH01	Soluble	Solid	DI Leach	
890-5415-2	BH01A	Soluble	Solid	DI Leach	
890-5415-3	PH01	Soluble	Solid	DI Leach	
890-5415-4	PH02	Soluble	Solid	DI Leach	
MB 880-64133/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64133/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64133/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5415-1 MS	BH01	Soluble	Solid	DI Leach	
890-5415-1 MSD	BH01	Soluble	Solid	DI Leach	

Analysis Batch: 64315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-1	BH01	Soluble	Solid	300.0	64133
890-5415-2	BH01A	Soluble	Solid	300.0	64133
890-5415-3	PH01	Soluble	Solid	300.0	64133

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

HPLC/IC (Continued)

Analysis Batch: 64315 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5415-4	PH02	Soluble	Solid	300.0	64133
MB 880-64133/1-A	Method Blank	Soluble	Solid	300.0	64133
LCS 880-64133/2-A	Lab Control Sample	Soluble	Solid	300.0	64133
LCSD 880-64133/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64133
890-5415-1 MS	BH01	Soluble	Solid	300.0	64133
890-5415-1 MSD	BH01	Soluble	Solid	300.0	64133

Lab Chronicle

Client: Ensolum
Project/Site: Corral Canyon Expansion BatteryJob ID: 890-5415-1
SDG: 03C1558273

Client Sample ID: BH01

Date Collected: 10/05/23 09:40

Date Received: 10/05/23 11:40

Lab Sample ID: 890-5415-1

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	64292	10/09/23 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64326	10/11/23 05:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64493	10/11/23 05:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			64378	10/09/23 18:56	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	64055	10/06/23 13:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64187	10/09/23 18:56	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	64133	10/06/23 12:09	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64315	10/09/23 21:39	CH	EET MID

Client Sample ID: BH01A

Date Collected: 10/05/23 09:45

Date Received: 10/05/23 11:40

Lab Sample ID: 890-5415-2

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	64292	10/09/23 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64326	10/11/23 05:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64493	10/11/23 05:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			64378	10/09/23 19:17	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	64055	10/06/23 13:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64187	10/09/23 19:17	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	64133	10/06/23 12:09	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64315	10/09/23 21:59	CH	EET MID

Client Sample ID: PH01

Date Collected: 10/05/23 09:50

Date Received: 10/05/23 11:40

Lab Sample ID: 890-5415-3

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	64292	10/09/23 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64326	10/11/23 05:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64493	10/11/23 05:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			64378	10/09/23 19:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	64055	10/06/23 13:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64187	10/09/23 19:39	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	64133	10/06/23 12:09	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64315	10/09/23 22:06	CH	EET MID

Client Sample ID: PH02

Date Collected: 10/05/23 10:00

Date Received: 10/05/23 11:40

Lab Sample ID: 890-5415-4

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	64292	10/09/23 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64326	10/11/23 06:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64493	10/11/23 06:13	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Corral Canyon Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

Client Sample ID: PH02
Date Collected: 10/05/23 10:00
Date Received: 10/05/23 11:40

Lab Sample ID: 890-5415-4
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			64378	10/10/23 11:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	64312	10/09/23 17:26	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64318	10/10/23 11:51	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	64133	10/06/23 12:09	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	64315	10/09/23 22:26	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 Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

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 Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

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 Expansion Battery

Job ID: 890-5415-1
SDG: 03C1558273

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5415-1	BH01	Solid	10/05/23 09:40	10/05/23 11:40	0.5
890-5415-2	BH01A	Solid	10/05/23 09:45	10/05/23 11:40	1'
890-5415-3	PH01	Solid	10/05/23 09:50	10/05/23 11:40	1'
890-5415-4	PH02	Solid	10/05/23 10:00	10/05/23 11:40	1'

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

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-7296
HOBBS, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenco



Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Brall	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy
Address:	3122 Nat'l Parks Hwy	Address:	3104 E Greene St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	bbrall@ensolum.com

Work Order Comments	
Program: <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:	

Project Name:	Central Canyon Expansion Battery Turn Around	ANALYSIS REQUEST
Project Number:	03C1558273	
Project Location:	32.15338, -103.99937	
Sampler's Name:	Meredith Roberts	
P.O. #:		



890-5415 Chain of Custody

SAMPLE RECEIPT	
Samples Received Intact:	(Yes) No (Yes) No
Cooler Custody Seals:	Thermometer ID: TMM 667
Sample Custody Seals:	Correction Factor: -0.2
Total Containers:	Temperature Reading: 3.51
	Corrected Temperature: 3.2

Temp Blank:	(Yes) No	Wet Ice:	Yes No
Thermometer ID:	TMM 667		
Correction Factor:	-0.2		
Temperature Reading:	3.51		
Corrected Temperature:	3.2		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont
-----------------------	--------	--------------	--------------	-------	-----------	-----------

BH01	S	10/5/23	0940	0.5'	G	1
BH01A	I	↓	0945	1'	↓	↓
PH01	↓	↓	0950	↓	↓	↓
PH02	↓	↓	1000	↓	↓	↓

Parameters						
Pres. Code						

Parameters						
Pres. Code						

Parameters						
Pres. Code						

Parameters						
Pres. Code						

Parameters						
Pres. Code						

Parameters						
Pres. Code						

Parameters						
Pres. Code						

Parameters						
Pres. Code						

Parameters						
Pres. Code						

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr 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.			
---	--	--	--

Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
1. Meredith Roberts	1. Ben Brall	2. Ben Brall	2. Ben Brall
3. Ben Brall	3. Ben Brall	4. Ben Brall	4. Ben Brall
5. Ben Brall	5. Ben Brall	6. Ben Brall	6. Ben Brall

Revised Date 08/25/2020 Rev. 20202

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5415-1

SDG Number: 03C1558273

Login Number: 5415

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: 890-5415-1

SDG Number: 03C1558273

Login Number: 5415

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 10/06/23 10:03 AM

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



APPENDIX E

NMOCD Notifications

From: [Rodgers, Scott, EMNRD](#)
To: [Green, Garrett J](#); [Hamlet, Robert, EMNRD](#); [Bratcher, Michael, EMNRD](#)
Cc: [Ben Belill](#); [DelawareSpills /SM](#); [Collins, Melanie](#)
Subject: RE: [EXTERNAL] XTO - 48-Hour Liner Inspection Notification - Corral Canyon Expansion - Incident Number nAPP2322648859
Date: Wednesday, September 20, 2023 5:38:15 PM

You don't often get email from scott.rodgers@emnrd.nm.gov. [Learn why this is important](#)

[**EXTERNAL EMAIL**]

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

Scott Rodgers • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
505.469.1830 | scott.rodgers@emnrd.nm.gov
<http://www.emnrd.nm.gov/oed>



From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Wednesday, September 20, 2023 3:13 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Ben Belill <bbelill@ensolum.com>; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Collins, Melanie <melanie.collins@exxonmobil.com>
Subject: [EXTERNAL] XTO - 48-Hour Liner Inspection Notification - Corral Canyon Expansion - Incident Number nAPP2322648859

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

Good afternoon,

This is sent as a 48-hour notification, XTO is scheduled to inspect the following lined containment listed below on Monday, September 25, 2023. Please call us with any questions or concerns.

Site: Corral Canyon Expansion Battery
Incident Number: nAPP2322648859
Time: 10:00 am MST
GPS Coordinates: (32.15338, -103.99937)

From: [Rodgers, Scott, EMNRD](#)
To: [Collins, Melanie](#); [Hamlet, Robert, EMNRD](#)
Cc: [Green, Garrett J](#); [Ben Bellil](#); [Tacoma Morrissey](#); [Bratcher, Michael, EMNRD](#)
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 10/2/23 - 10/6/23)
Date: Thursday, September 28, 2023 11:29:30 AM
Attachments: [image003.png](#)

Some people who received this message don't often get email from scott.rodgers@emnrd.nm.gov. [Learn why this is important](#)

[**EXTERNAL EMAIL**]

The OCD has received your notification. When reporting sampling at multiple locations it is required to provide and date and time for each location. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Scott Rodgers • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
505.469.1830 | scott.rodgers@emnrd.nm.gov
<http://www.emnrd.nm.gov/oecd>



From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Thursday, September 28, 2023 9:13 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>; bbellil@ensolum.com; Tacoma Morrissey <tmorrissey@ensolum.com>
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 10/2/23 - 10/6/23)

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

All,

XTO plans to complete final sampling activities at the site listed below for the week of October 2, 2023.

Wednesday

- Corral Canyon Expansion Battery / nAPP2322648859

Thursday

- Corral Canyon Expansion Battery / nAPP2322648859

Thank you,

Melanie Collins



Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756



APPENDIX B

Photographic Log



Photographic Log

XTO Energy, Inc.

Corral Canyon Expansion Battery
Incident Number NAPP2322648859

Photograph: 1 Date: 5/22/2024
Description: Final excavation extent.
View: North



Photograph: 2 Date: 5/22/2024
Description: Final excavation extent.
View: South



Photograph: 3 Date: 5/22/2024
Description: Final excavation extent.
View: West



Photograph: 4 Date: 6/5/2024
Description: Excavation backfilled.
View: North



APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



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

May 29, 2024

BEN BELILL

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: CORRAL CANYON EXPANSION BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/22/24 16:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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.

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, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FS01 0.5' (H242853-01)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44	
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88	
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07	
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83	
Total BTEx	<0.300	0.300	05/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	592	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 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, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FS02 0.5' (H242853-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEX	<0.300	0.300	05/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 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, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FS03 0.5' (H242853-03)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEX	<0.300	0.300	05/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	496	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FS04 0.5' (H242853-04)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEX	<0.300	0.300	05/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	496	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: FS05 0.5' (H242853-05)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEX	<0.300	0.300	05/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 99.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: CS01 0.5' (H242853-06)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEx	<0.300	0.300	05/24/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 94.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: CS02 0.5' (H242853-07)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEX	<0.300	0.300	05/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 56.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 60.5 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: CS03 0.5' (H242853-08)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEX	<0.300	0.300	05/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 96.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: CS04 0.5' (H242853-09)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44	
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88	
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07	
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83	
Total BTEX	<0.300	0.300	05/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/24/2024	ND	432	108	400	0.00	

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	05/23/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/23/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/23/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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Analytical Results For:

ENSOLUM, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: CS05 0.5' (H242853-10)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEX	<0.300	0.300	05/24/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/24/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 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, LLC
 BEN BELILL
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 05/22/2024
 Reported: 05/29/2024
 Project Name: CORRAL CANYON EXPANSION BATTERY
 Project Number: 03C1558273
 Project Location: XTO 32.15338,-103.99937

Sampling Date: 05/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW01 0 - 0.5' (H242853-11)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2024	ND	1.71	85.7	2.00	3.44		
Toluene*	<0.050	0.050	05/24/2024	ND	1.85	92.3	2.00	3.88		
Ethylbenzene*	<0.050	0.050	05/24/2024	ND	1.89	94.6	2.00	4.07		
Total Xylenes*	<0.150	0.150	05/24/2024	ND	5.75	95.8	6.00	3.83		
Total BTEX	<0.300	0.300	05/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	05/24/2024	ND	432	108	400	0.00		

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	05/24/2024	ND	215	107	200	1.06	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	198	98.8	200	0.498	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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*=Accredited Analyte

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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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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

Company Name: Ensolum, LLC

Project Manager: Ben Bellini

Address: 3122 National Parks Hwy

City: Carlsbad

Phone #: 989-854-0852 Fax #:

Project #: 03C1558273

Project Name: Corral Canyon Expansion Battery

Project Location: 32-15338-103.99937

Sampler Name: Marianna O'Dell

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: XTO Energy

Attn: Amy Rutherford

Address: 3104 E. Greengate

City: Carlsbad

State: NM Zip: 88220

Phone #:

Fax #:

FOR LAB USE ONLY

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

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Relinquished By:

Received By:

Verbal Result: ☐ Yes ☒ No

Add'l Phone #:

All Results are emailed. Please provide Email address:

Relinquished By:

Received By:

REMARKS: Incident #: APP2322 048859
Cost center: 2125321001
Facility ID: fAPP21230148204

Turnaround Time: ☒ Standard ☐ Rush

Thermometer ID #113 #140

Correction Factor: 40C

Thermometer ID #113 #140

Correction Factor: 40C

Turnaround Time: ☒ Standard ☐ Rush

Thermometer ID #113 #140

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Thermometer ID #113 #140

Correction Factor: 40C

Turnaround Time: ☒ Standard ☐ Rush

Thermometer ID #

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

QUESTIONS

Action 393082

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 393082
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2322648859
Incident Name	NAPP2322648859 CORRAL CANYON EXPANSION BATTERY @ 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 EXPANSION BATTERY
Date Release Discovered	08/02/2023
Surface Owner	Federal

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: Equipment Failure Pump Produced Water Released: 5 BBL Recovered: 5 BBL Lost: 0 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)	Not answered.

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QUESTIONS, Page 2

Action 393082

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 393082
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	More info needed to determine if this will be treated as 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: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 10/16/2024
--	--

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QUESTIONS, Page 3

Action 393082

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 393082
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 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	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Between ½ and 1 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<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>	
Requesting a remediation plan approval with this submission	Yes
<i>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.</i>	
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)	592
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<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>	
On what estimated date will the remediation commence	09/25/2024
On what date will (or did) the final sampling or liner inspection occur	05/22/2024
On what date will (or was) the remediation complete(d)	05/22/2024
What is the estimated surface area (in square feet) that will be reclaimed	972
What is the estimated volume (in cubic yards) that will be reclaimed	118
What is the estimated surface area (in square feet) that will be remediated	972
What is the estimated volume (in cubic yards) that will be remediated	118
<i>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.</i>	
<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 4

Action 393082

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 393082
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<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>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<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: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 10/16/2024
<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 393082

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 393082
	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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 6

Action 393082

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 393082
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	345078
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/23/2024
What was the (estimated) number of samples that were to be gathered	20
What was the sampling surface area in square feet	4000

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	972
What was the total volume (cubic yards) remediated	118
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	972
What was the total volume (in cubic yards) reclaimed	118
Summarize any additional remediation activities not included by answers (above)	"Excavation and soil sampling activities were conducted at the Site to address the August 2, 2023, produced water release. Laboratory analytical results from all confirmation soil samples collected from the final excavation extent or on the surface within the release extent area, indicated that all COC concentrations were in compliance with the Closure Criteria and reclamation requirement. Based on soil sample analytical results, no further remediation is required. The excavation was backfilled with material purchased locally and the surface recontoured to match pre-existing Site conditions. Excavation of waste-containing soil has mitigated impacts at this Site. Depth to groundwater has been determined to be between 51 and 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater."

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: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 10/16/2024
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Action 393082

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 393082
	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 393082

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 393082
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2322648859 CORRAL CANYON EXPANSION BATTERY, thank you. This Remediation Closure Report is approved.	11/14/2024