ENSOLUM

October 7, 2024

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

Re: Closure Request Addendum
ROW 2 Pipeline
Incident Number nAPP2304148392
Eddy County, New Mexico

To Whom it May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared the following addendum to the original *Closure Request* submitted on August 17, 2023. This addendum details the additional remediation activities completed at the ROW 2 Pipeline (Site) in response to the denial by the New Mexico Oil Conservation Division (NMOCD) of the original *Closure Request* on March 1, 2024. In the denial, NMOCD indicated that the Site was located off pad and the reclamation requirement applies to the top 4 feet of the release area. Based on the additional remediation activities described below, XTO is submitting this *Closure Request Addendum* and requesting closure for Incident Number nAPP2304148392.

BACKGROUND

The Site is located in Unit G, Section 20, Township 24 South, Range 31 East, in Eddy County, New Mexico (32.20566°, -103.79571°) and is associated with oil and gas exploration and production operations on federal land managed by the Bureau of Land Management (BLM). The Site Location is shown in Figure 1.

On January 28, 2023, human error resulted in the failure of a lay flat line overseen by a third-party water transfer company (Quik Pipe). Approximately 144 barrels (bbls) of produced water were released on a pipeline Right-of-Way (ROW) and adjacent pasture area. The release extent is depicted in Figure 2. A vacuum truck was dispatched and recovered approximately 60 bbls of produced water. XTO reported the release to the NMOCD via Notification of Release (NOR) on February 10, 2023 and the Initial C-141 Application (C-141) was submitted the same day. The release was assigned Incident Number nAPP2304148392.

Between March 2023 and May 2023, BDS Enterprises (BDS) was contracted by Qwik Pipe to conduct assessment, delineation, and excavation activities in response to the release. An estimated 1,050 cubic yards of impacted soil were excavated from the Site. Based on the site assessment activities and laboratory analytical results from the soil sampling events, XTO submitted a *Closure Request* on August 17, 2023, requesting no further action (NFA) for the release.

On March 1, 2024, NMOCD denied the *Closure Request* for Incident Number nAPP2304148392 for the following reasons:

- *Release occurred off pad. All off pad areas must contain a minimum of 4 feet nonwaste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. Please address this release according to 19.15.29 NMAC.*

After the *Closure Request* was denied by the NMOCD, XTO contracted Ensolum to review the previous *Closure Request* and complete the required additional remedial activities. Ensolum reviewed the *Closure Request* and confirmed the following remedial actions were required:

- The southern portion of the release, labeled Area 1 in Figure 3, was not excavated and required confirmation sampling to confirm the absence of waste-containing soils.
- The eastern portion of the release, labeled Area 2 in Figure 3, was excavated to 2 feet bgs and required additional excavation and confirmation soil sampling to confirm the removal of waste-containing soils.
- The western portion of the excavation, labeled Area 3 in Figure 3, did not have reported depths for the sidewall confirmation samples. As such, the sidewalls in that area of the excavation required additional confirmation soil sampling.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented below.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on data from a soil boring drilled to investigate regional groundwater depth. In December 2020, a soil boring permitted by New Mexico Office of the State Engineer (C-4499) was completed approximately 0.26 miles southeast of the Site utilizing hollow stem auger method. Soil boring C-4499 was drilled to a depth of 110 feet bgs. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The temporary well was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record & Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a seasonal dry wash, located approximately 1.76 miles northwest of the Site. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Potential Site receptors are identified on Figure 1.

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

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

- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

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

ADDITIONAL REMEDIATION ACTIVITIES AND ANALYTICAL RESULTS

Ensolum personnel were onsite between September 3 and September 9, 2024, to complete the additional remedial activities described above.

AREA 1: Confirmation Soil Sampling

In order to confirm the absense of impacted or waste-containing soil in Area 1, forty-four 5-point composite confirmation soil samples were collected from the pasture area that represented no more than 200 square feet of the release extent in an approximate 8,734 square foot area. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples CS01 through CS44 were collected just beneath the ground surface at a depth of approximately 0.5 feet bgs. The soil was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips and mapped with a handheld GPS unit. The confirmation soil sample locations are depicted on Figure 4.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following contaminants of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standards Method SM4500.

AREA 2: Excavation previously completed to 2 feet bgs; Additional excavation and soil sampling required

Additional excavation activities were performed by use of heavy equipment in Area 2. To direct excavation activities, soil was field screened for VOCs and chloride. Once field screening results indicated waste-containing soil was adequately removed, 5-point composite soil samples were collected every 200 square feet from the floor and 200 square feet from the sidewall of the excavation extent. The 5-point composite samples were collected, handled, and analyzed as described above. Confirmation soil samples FS01 through FS21 were collected from the floor of the excavation at depths ranging from 2 feet to 4 feet bgs. Confirmation soil samples SW07 through SW12 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The confirmation soil sample locations were mapped utilizing a GPS unit and are depicted on Figure 4. Photographic documentation of the excavation activities is provided in Appendix B.

The Area 2 excavation extent measured approximately 4,048 square feet. A total of approximately 300 cubic yards of impacted soil was removed during the additional excavation activies. The impacted soil was transported and disposed of at the OWL Disposal Facility in Jal, New Mexico.

AREA 3: Excavation previously completed to 4 feet bgs; Soil sampling required

Six sidewall soil samples were collected to confirm the absence of waste-containing soils in the top 4 feet of the previously excavated area. Sidewall soil samples SW01 through SW06 were collected from the previous excavation sidewalls at depths ranging from the ground surface to 4 feet bgs. The 5-point composite samples were collected, handled, and analyzed as described above. The sidewall confirmation soil sample locations are depicted on Figure 4. Photographic documentation of the sampling activities is provided in Appendix B.

During the remedial actions completed between March and May 2023 and the additional excavation and sampling completed in September 2024, a total of approximately 1,370 cubic yards of impacted soil was removed. The impacted soil was transported and disposed of at an approved disposal facility. After completion of confirmation sampling, the excavation area was secured with fencing.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all confirmation soil samples, sidewall soil samples, and floor soil samples were in compliance with reclamation requirements. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix C.

CLOSURE REQUEST

Additional remediation and sampling activities were conducted at the Site to address the denied *Closure Request* submitted for the January 28, 2023, release of produced water. The denied *Closure Request* is included in Appendix D. Laboratory analytical results for all confirmation soil samples indicated that COC concentrations were compliant with the Closure Criteria and the reclamation requirement in the top four feet. Based on the soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. The disturbed area on the ROW will be re-seeded with an approved BLM seed mixture within 90 days or the next recommended BLM planting season.

Excavation of impacted soil from the top four feet has mitigated impacts at this Site. Depth to groundwater has been determined to be greater than 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 nAPP2304148392.

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

Sincerely,
Ensolum, LLC

Tracy Hillard
Project Engineer

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

cc: Colton Brown, XTO
Kaylan Dirkx, XTO
Bureau of Land Management

Appendices:

Figure 1	Site Receptor Map
Figure 2	Release Extent Map
Figure 3	Areas of Additional Remediation Map
Figure 4	Confirmation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Log
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix D	August 17, 2023 *Closure Request*

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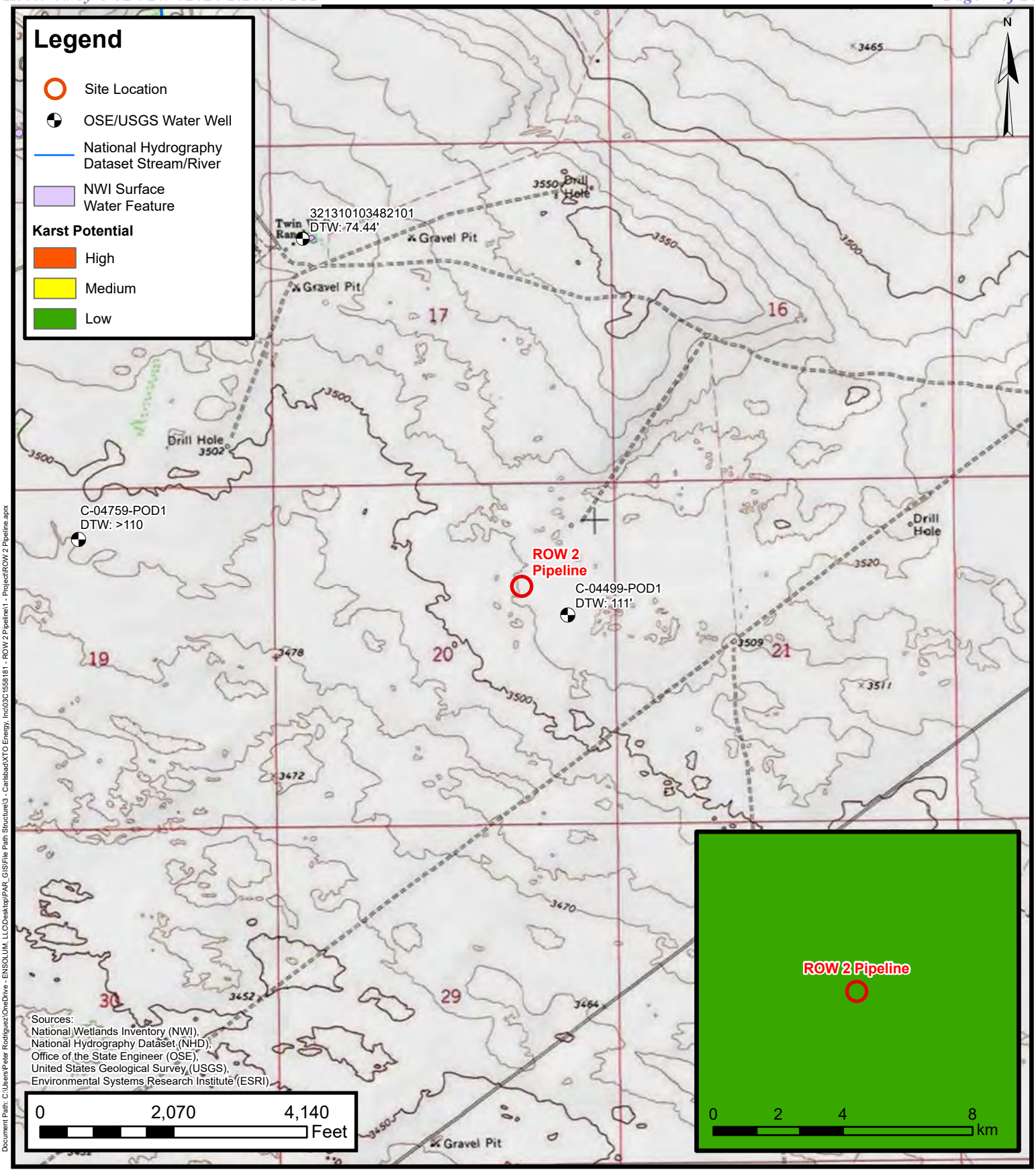
FIGURES



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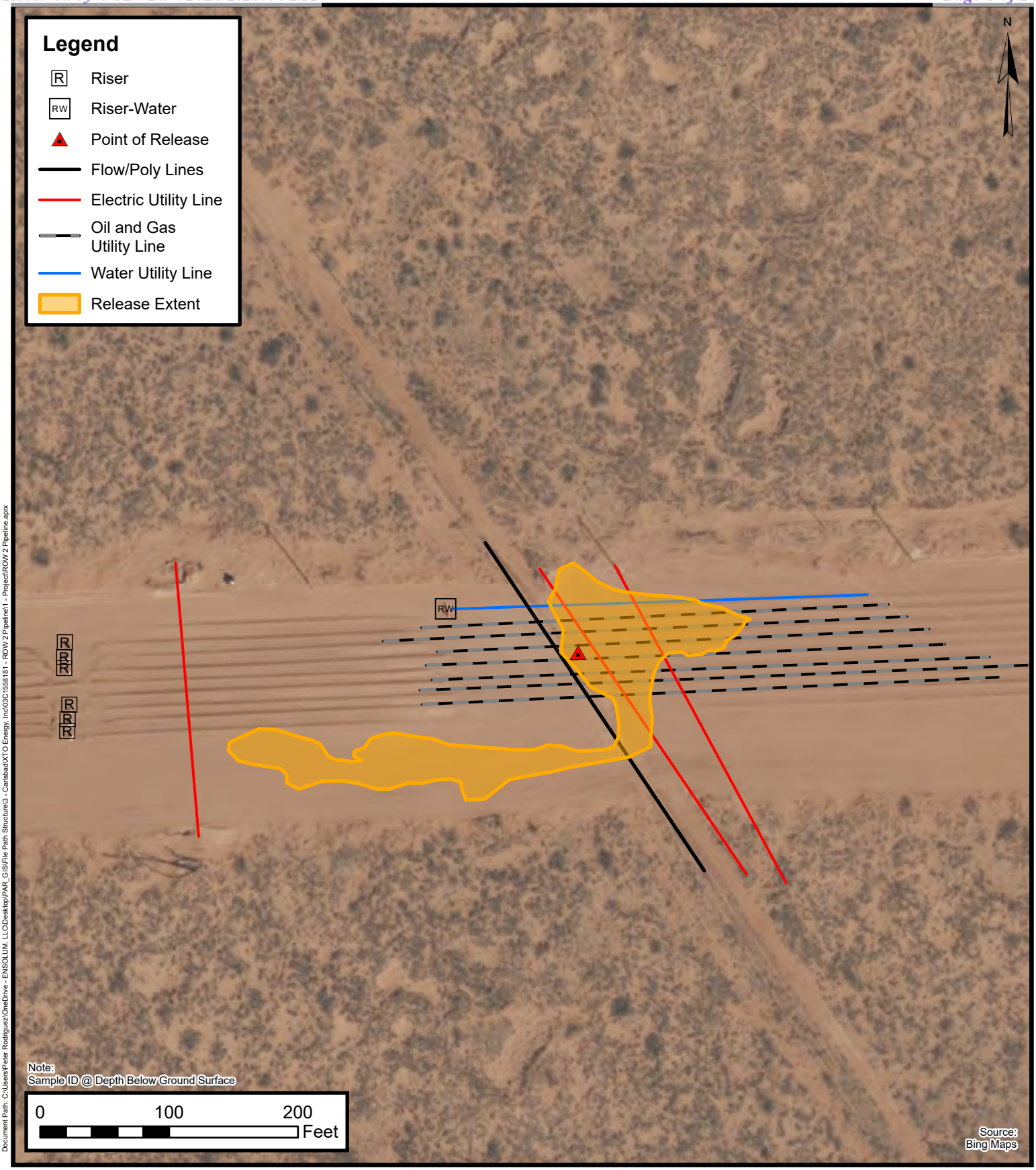
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

XTO Energy, Inc
ROW 2 Pipeline
Incident Number: nAPP2304148392
Unit G, Sec 20, T24S, R31E
Eddy County, New Mexico

FIGURE
1



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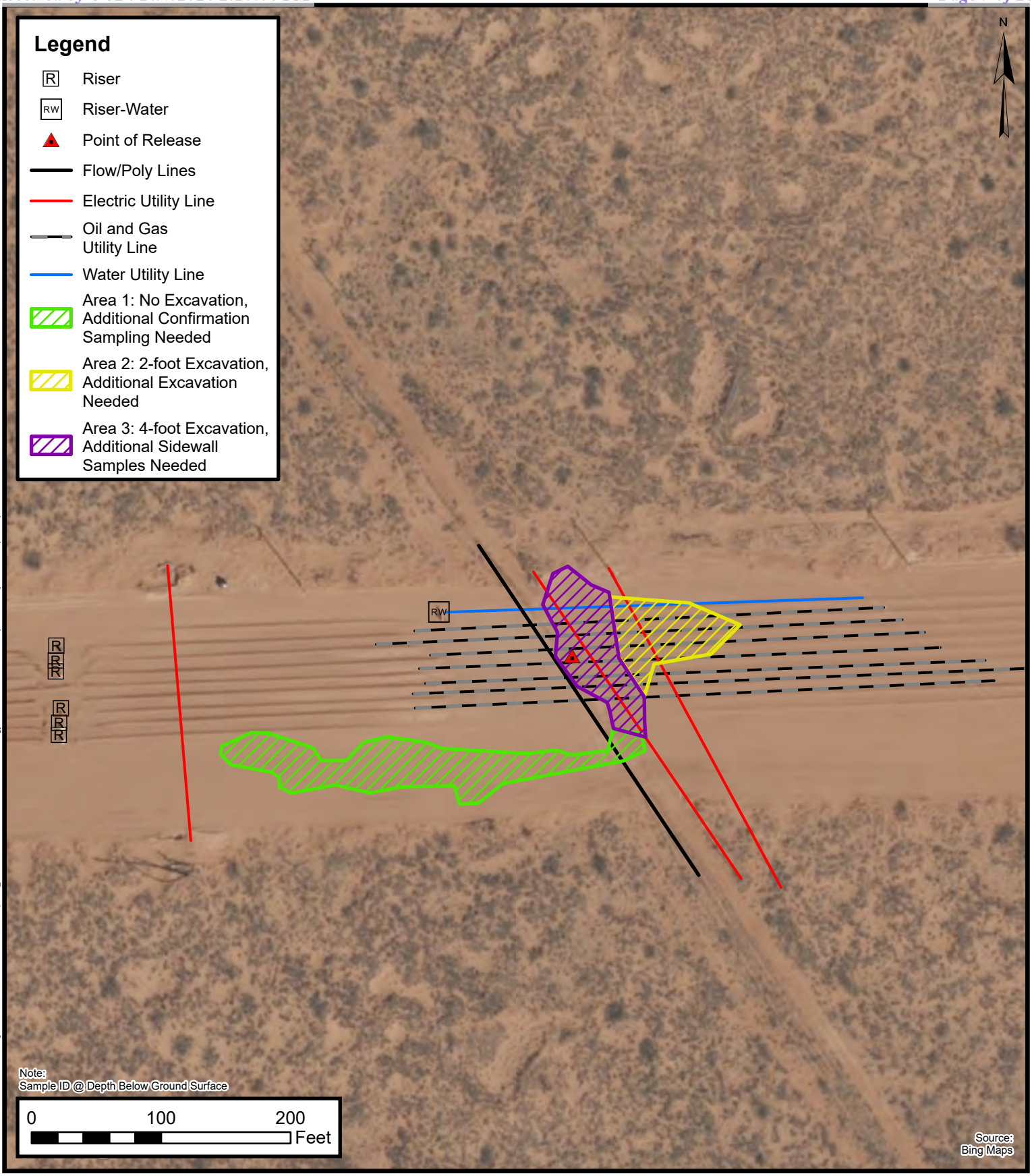
Release Extent Map

XTO Energy, Inc
ROW 2 Pipeline
Incident Number: nAPP2304148392
Unit G, Sec 20, T24S, R31E
Eddy County, New Mexico

FIGURE
2



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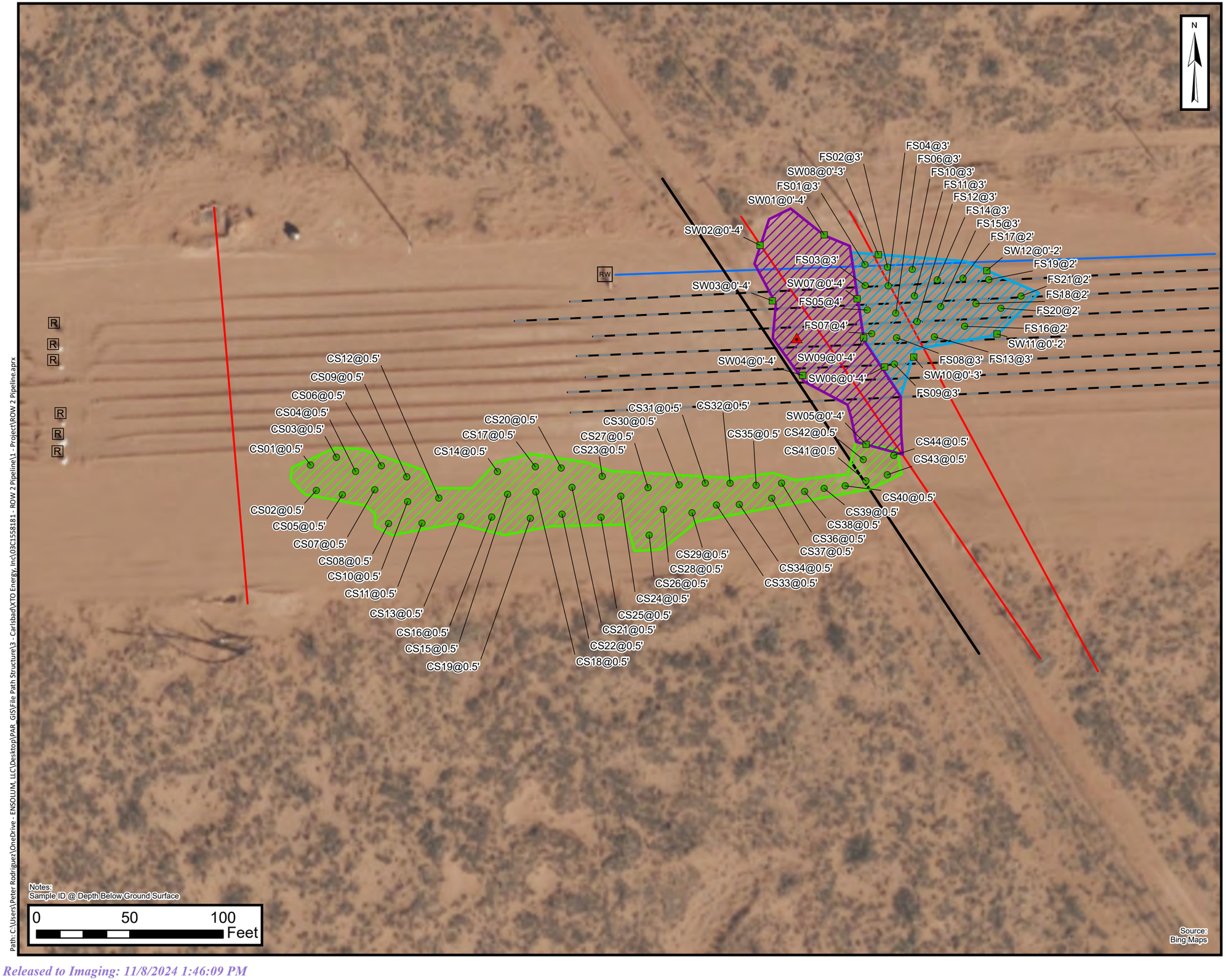
Areas of Additional Remediation Map

XTO Energy, Inc
ROW 2 Pipeline
Incident Number: nAPP2304148392
Unit G, Sec 20, T24S, R31E
Eddy County, New Mexico

FIGURE
3



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Legend

- Confirmation Sample Compliant with Closure Criteria
- Confirmation Sidewall Sample Compliant with Closure Criteria
- Point of Release
- Riser
- Riser-Water
- Flow/Poly Lines
- Electric Utility Line
- Oil and Gas Utility Line
- Water Utility Line
- Area 1: No Excavation, Additional Confirmation Sampling Needed
- Area 2: 2-foot Excavation, Additional Excavation Needed
- Area 3: 4-foot Excavation, Additional Sidewall Samples Needed

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Confirmation Soil Sample Locations

XTO Energy, Inc
ROW 2 Pipeline

Unit G, Sec 20, T24S, R31E
Eddy County, New Mexico

FIGURE
4

Incident Number: nAPP2304148392

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
ROW 2 Pipeline
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	NE	100	600
Confirmation Soil Samples										
CS01	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS02	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS03	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
CS04	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS05	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS06	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS07	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS08	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS09	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS10	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS11	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS12	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS13	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS14	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS15	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS16	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
CS17	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS18	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
CS19	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS20	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS21	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS22	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
CS23	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS24	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS25	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS26	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS27	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
CS28	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
~~CS29~~	~~9/3/2024~~	~~0.5~~	~~<0.050~~	~~<0.300~~	~~<10.0~~	~~<10.0~~	~~<10.0~~	~~<10.0~~	~~<10.0~~	~~1,060~~
CS29	9/13/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
ROW 2 Pipeline
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	NE	100	600
CS30	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS31	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS32	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS33	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS34	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS35	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS36	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS37	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS38	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS39	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS40	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS41	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS42	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS43	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS44	9/3/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
Floor Soil Samples										
FS01	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS02	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS03	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
FS04	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
FS05	9/9/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS06	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS07	9/9/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS08	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS09	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS10	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS11	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS12	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS13	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS14	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS15	9/9/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS16	9/9/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0

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NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**100**	**600**
FS17	9/9/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS18	9/9/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS19	9/9/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS20	9/9/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS21	9/9/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
Sidewall Soil Samples										
SW01	9/4/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
SW02	9/4/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336
SW03	9/4/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
SW04	9/4/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW05	9/4/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SW06	9/4/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SW07	9/9/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
SW08	9/9/2024	0 - 3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
SW09	9/9/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
SW10	9/9/2024	0 - 3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
SW11	9/9/2024	0 - 2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
SW12	9/9/2024	0 - 2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation requirement where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

~~Grey~~ text indicates soil sample removed during excavation activities or area was resampled

ENSOLUM

APPENDIX A

Referenced Well Records

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (MW-1)	n/a	C-4499

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

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

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32°	12'	15.89"	N
	LONGITUDE	-103°	47'	36.29"	W

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

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

SE NE Sec. 20 T24S R31E

2. DRILLING & CASING INFORMATION

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

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
12/30/2020	12/30/2020	temporary well material	110	n/a

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

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

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

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

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	110	±8.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

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

FOR OSE INTERNAL USE

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

FILE NO. C-4499	POD NO. 1	TRN NO. 682532	
LOCATION 24S.31E.20.243		WELL TAG ID NO. —	PAGE 1 OF 2

OSE DII JAN 27 2021 PM3:34

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	6	6	SAND, well graded, fine-to-large grain particles red-brown, dry	~~Y~~ ✓ N	
6	8	2	SAND, poorly graded, fine grained little clay mod. plasitcity, red-brown, moist	Y ✓ N	
8	11	3	CALICHE, mod. consolidated, some sand, medium /fine grain, white-tan, dry	Y ✓ N	
11	46	35	CALICHE, mod. consolidated, some sand, medium to fine grain, white-tan, dry.	Y ✓ N	
46	74	28	SAND, well-graded, medium grain,caliche gravel (1-4mm), light brown, dry.	Y ✓ N	
74	110	36	SAND, well-graded, fine/large grain, few clay, cohesive, red-brown, dry	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

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

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

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

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

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

Shane Eldridge

6. SIGNATURE

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

Jack Atkins — Jackie D. Atkins — 01/15/2021

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

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

FILE NO. C-4499	POD NO. 1	TRN NO. 682532
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2

OSE DIT JAN 27 2021 PM3:34

2021-1-15_C-4499_POD1_OSE_Well Record and Log_plu129-forsign

Final Audit Report 2021-01-15

Created:	2021-01-15
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAgs296c366oCIfIrLCiy9WDKJlrUnq-9u

"2021-1-15_C-4499_POD1_OSE_Well Record and Log_plu129-forsign" History

Document created by Lucas Middleton (lucas@atkinseng.com)
2021-01-15 - 8:45:00 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2021-01-15 - 8:45:35 PM GMT

Email viewed by Jack Atkins (jack@atkinseng.com)
2021-01-15 - 9:05:13 PM GMT- IP address: 74.50.153.115

Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2021-01-15 - 9:13:18 PM GMT - Time Source: server- IP address: 74.50.153.115

Agreement completed.
2021-01-15 - 9:13:18 PM GMT

OSE DIT JAN 27 2021 PM3:34

Adobe Sign

ENSOLUM

APPENDIX B

Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc
ROW 2 Pipeline
nAPP2304148392

Photograph: 1 Date: 9/3/2024
Description: Area 1 - composite soil sampling activities
View: Northwest

Photograph: 2 Date: 9/4/2024
Description: Excavation activities
View: Northeast

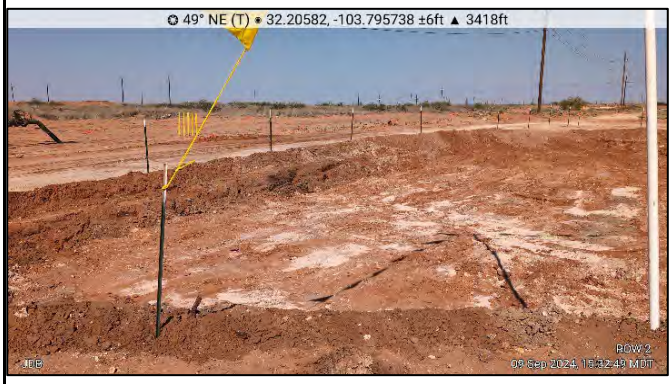
Photograph: 3 Date: 9/6/2024
Description: Excavation activities
View: North

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

ENSOLUM

Photographic Log
XTO Energy, Inc
ROW 2 Pipeline
nAPP2304148392

Photograph: 5 Date: 9/9/2024
Description: Excavation activities
View: Northeast



Photograph: 6 Date: 9/9/2024
Description: Excavation activities
View: Northeast

Photograph: 7 Date: 9/9/2024
Description: Final excavation extent
View: Southeast

Photograph: 8 Date: 9/9/2024
Description: Final excavation extent
View: West

ENSOLUM

APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

September 06, 2024

TACOMA MORRISSEY

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: ROW 2

Enclosed are the results of analyses for samples received by the laboratory on 09/03/24 16:50.

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

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 01 0.5 (H245340-01)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *106 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *120 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 02 0.5 (H245340-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *103 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *116 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 03 0.5 (H245340-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.9 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *92.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *104 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 04 0.5 (H245340-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *89.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 05 0.5 (H245340-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.1 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *86.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *98.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 06 0.5 (H245340-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.1 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *97.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 07 0.5 (H245340-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *116 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 08 0.5 (H245340-08)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *100 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

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Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 09 0.5 (H245340-09)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *100 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *113 %* *49.1-148*

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Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 10 0.5 (H245340-10)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.7 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *91.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *102 %* *49.1-148*

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 11 0.5 (H245340-11)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *98.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *111 %* *49.1-148*

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 12 0.5 (H245340-12)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *98.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 13 0.5 (H245340-13)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	1.91	95.6	2.00	1.09	
Toluene*	<0.050	0.050	09/04/2024	ND	1.86	93.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	1.88	94.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	5.60	93.4	6.00	2.39	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	222	111	200	5.47	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	222	111	200	4.21	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *87.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.9 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 14 0.5 (H245340-14)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *84.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *99.8 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 15 0.5 (H245340-15)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *88.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 16 0.5 (H245340-16)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *87.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 17 0.5 (H245340-17)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	09/04/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *95.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 18 0.5 (H245340-18)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *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	**80.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *95.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 19 0.5 (H245340-19)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**48.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *93.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *111 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 20 0.5 (H245340-20)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.8 %* *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	**16.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *89.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *105 %* *49.1-148*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 21 0.5 (H245340-21)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**32.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *92.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 22 0.5 (H245340-22)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *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	**80.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *90.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *108 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 23 0.5 (H245340-23)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**16.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *98.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *117 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 24 0.5 (H245340-24)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**32.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *81.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 25 0.5 (H245340-25)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	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	**16.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *94.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *111 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 26 0.5 (H245340-26)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**16.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *85.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *101 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 27 0.5 (H245340-27)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**64.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *85.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *100 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 35 0.5 (H245340-28)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**16.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *95.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 36 0.5 (H245340-29)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**48.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *88.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *49.1-148*

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 37 0.5 (H245340-30)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	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	**192**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *92.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 38 0.5 (H245340-31)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**16.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *97.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *116 %* *49.1-148*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 39 0.5 (H245340-32)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	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	**144**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *91.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 40 0.5 (H245340-33)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.11	106	2.00	7.41	
Toluene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	8.13	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.13	106	2.00	8.86	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.59	110	6.00	8.26	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**32.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	223	111	200	2.52	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	213	107	200	3.89	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *81.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.3 %* *49.1-148*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 41 0.5 (H245340-34)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	1.68	
Toluene*	<0.050	0.050	09/04/2024	ND	2.05	102	2.00	3.14	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.12	106	2.00	4.15	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.51	108	6.00	4.40	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**48.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	199	99.6	200	0.269	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	201	101	200	1.80	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *81.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *99.2 %* *49.1-148*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 42 0.5 (H245340-35)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	1.68	
Toluene*	<0.050	0.050	09/04/2024	ND	2.05	102	2.00	3.14	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.12	106	2.00	4.15	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.51	108	6.00	4.40	
Total BTEX	<0.300	0.300	09/04/2024	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	**32.0**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	199	99.6	200	0.269	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	201	101	200	1.80	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *83.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *99.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 43 0.5 (H245340-36)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	1.68	
Toluene*	<0.050	0.050	09/04/2024	ND	2.05	102	2.00	3.14	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.12	106	2.00	4.15	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.51	108	6.00	4.40	
Total BTEX	<0.300	0.300	09/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	09/04/2024	ND	416	104	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	09/04/2024	ND	199	99.6	200	0.269	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	201	101	200	1.80	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *83.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *100 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
TACOMA MORRISSEY
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	09/03/2024	Sampling Date:	09/03/2024
Reported:	09/06/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

Sample ID: CS 44 0.5 (H245340-37)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2024	ND	2.14	107	2.00	1.68	
Toluene*	<0.050	0.050	09/04/2024	ND	2.05	102	2.00	3.14	
Ethylbenzene*	<0.050	0.050	09/04/2024	ND	2.12	106	2.00	4.15	
Total Xylenes*	<0.150	0.150	09/04/2024	ND	6.51	108	6.00	4.40	
Total BTEX	<0.300	0.300	09/04/2024	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	**112**	16.0	09/04/2024	ND	416	104	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	09/04/2024	ND	199	99.6	200	0.269	
DRO >C10-C28*	<10.0	10.0	09/04/2024	ND	201	101	200	1.80	
EXT DRO >C28-C36	<10.0	10.0	09/04/2024	ND					

Surrogate: 1-Chlorooctane *82.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.1 %* *49.1-148*

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CARDINAL Laboratories

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

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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Celey D. Keene, Lab Director/Quality Manager

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CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Tacoma Morrissey	P.O. #:
Address: 601 N Marienfield St #400	Company: XTO
City: Midland State: TX Zip: 79701	Attn: Amy Ruth
Phone #: 337-257-8307 Fax #:	Address:
Project #: 03C155818 Project Owner:	City: Carlsbad
Project Name: ROW 2	State: NM Zip: 88220
Project Location:	Phone #:
Sampler Name: Kaoru Shimada, Josh Boxler	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	Chloride 4500
1124520																		
1	CS01	0.5	C	1			X					X		9-3-24	1040	X	X	X
2	CS02	↓	↓	↓			↓					↓		↓	1041	↓	↓	↓
3	CS03														1043			
4	CS04														1044			
5	CS05														1046			
6	CS06														1107			
7	CS07														1141			
8	CS08														1113			
9	CS09														1115			
10	CS10	0.5	C	1			X					X		9-3-24	1117	X	X	X

Relinquished By: Kaoru Shimada	Date: 9-3-24 Time: 1450	Received By:	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: tmorrissey@ensolum.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.8 Corrected Temp. °C 2.2	Sample Condition Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) AD

REMARKS: NAPP2304148392 AFEs: DD.2017.04407.CAP.CMP.01 DD.2017.04406.CAP.CMP.01, DD.2017.04378.CAP.CMP.01

Turnaround Time: Standard ☑ Rush ☐ 9-3-24
Thermometer ID #113 #140
Correction Factor 0.5°C -0.6

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

45

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: ~~Beaux Jennings~~ Tacoma Morrissey	P.O. #:
Address: 601 N Marienfeld Street, Suite 400	Company: ~~Oxy USA Inc.~~ XTO
City: Midland State: TX Zip: 79701	Attn: ~~Wade Dittrich~~ Amy Ruth
Phone #: ~~240-240-8858~~ (337) 257-8307 Fax #:	Address:
Project #: 03C155818 Project Owner:	City: Carlsbad
Project Name: Row 2	State: NM Zip: 88220
Project Location:	Phone #: ~~575 390 2828~~
Sampler Name: Kaoru Shimada Josh Coxler	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	Chloride 4500
H245340																		
11	CS11	0.5	C	1			X					X		9-3-24	1139	X	X	X
12	CS12														1141			
13	CS13														1143			
14	CS14														1146			
15	CS15														1149			
16	CS16														1216			
17	CS17														1318			
18	CS18														1220			
19	CS19														1223			
20	CS20	0.5	C	1			X					X		9-3-24	1225	X	X	X

Relinquished By: Kaoru Shimada	Date: 9-3-24 Time: 1030	Received By:	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: tmorrissey@ensolum.com
			REMARKS: Same Incident ID & AFEs' (3)
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 28°C Corrected Temp. °C 22°C	Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) AP
			Turnaround Time: Standard ☒ Rush ☐ DDA 9-3-24 Thermometer ID #113 #140 Correction Factor -0.5°C -0.6°C
			Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: ~~Beaux Jennings~~ Tacoma Morrissey	P.O. #:
Address: 601 N Marienfeld Street, Suite 400	Company: ~~Oxy USA Inc.~~ XTO
City: Midland State: TX Zip: 79701	Attn: ~~Wade Dittrich~~ Amy Ruth
Phone #: ~~240-219-8056~~ (337) ~~Fax #:~~ 257-8307	Address:
Project #: 03C1558181 Project Owner:	City: Carlsbad
Project Name: Row 2	State: NM ~~Zip:~~ 88220
Project Location:	Phone #: ~~575-390-2828~~
Sampler Name: Kaonu Shimada, Josh Boxley	Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	8021B BTEX	8015M TPH	Chloride 4500
H245340																		
21	CS21	0.5	C	1			X					X		9-3-24	1259	X	X	X
22	CS22	"	"	"			"					"		"	1301	"	"	"
23	CS23														1415			
24	CS24														1417			
25	CS25														1419			
26	CS26														1421			
27	CS27														1423			
7 AD9324	~~CS28~~																	
	CS29																	
	CS30	0.5	C	1			X					X		9-3-24		X	X	X

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Relinquished By: Kaonu Shimada	Date: 9-3-24 Time: 1450	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: tmorrissey@ensolum.com
			REMARKS: Same Incident ID & AFE Keys.

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.8	Sample Condition: Cool ~~Yes~~ ☐ No; Intact ~~Yes~~ ☐ No	CHECKED BY: (Initials) AP	Turnaround Time: Standard ☒ Rush ☐ ADD 3.24 Thermometer ID ~~#113~~ #1 Correction Factor ~~0.5~~ -0.4
	Corrected Temp. °C 2.4			Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST 4/5

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: ~~Beau Jennings~~ Tacoma Morrissey	P.O. #:
Address: 601 N Marienfeld Street, Suite 400	Company: ~~Oxy USA Inc.~~ STO
City: Midland State: TX Zip: 79701	Attn: ~~Wade Dittrich~~ Amy Ruth
Phone #: ~~210-210-8838~~ (337) ~~[illegible]~~ 257-8307	Address:
Project #: 03C1558181 Project Owner:	City: Carlsbad
Project Name: Row 2	State: NM Zip: 88220
Project Location:	Phone #: ~~575-390-2828~~
Sampler Name: Kaoru Shimada, Josh Boxley	Fax #:

FOR LAB USE ONLY					MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST													
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	BTEX 8021D	TPH 8015M	Chloride 4500													
H245340																														
28	CS35	0.5	C	1			X							9-3-24	1155	X	X	X												
29	CS36	↓	C	1			X							↓	1150	↓	↓	↓												
30	CS37		C	1			X								1145															
31	CS38		C	1			X								1140															
32	CS39	0.5	C	1			X							9-3-24	1135	X	X	X												

Relinquished By: Kaoru Shimada	Date: 9.3.24 Time: 1050	Received By: [signature]	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: tmorrissey@ensolum.com
			REMARKS: Same Incident ID & AFE Keys.
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.8 Corrected Temp. °C 2.2	Sample Condition Cool Yes No Intact Yes No	CHECKED BY: (Initials) AD
			Turnaround Time: Standard ☒ Rush ☐ Thermometer ID #113 Correction Factor -0.6 °C
			Bacteria (only) Sample Condition Cool Yes No Intact Yes No Observed Temp. °C Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

5/5

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: ~~Beaux Jennings~~ Tacoma Morrissey	P.O. #:
Address: 601 N Marienfeld Street, Suite 400	Company: ~~Oxy USA Inc.~~ XTO
City: Midland State: TX Zip: 79701	Attn: ~~Wade Dittrich~~ Amy Ruth
Phone #: ~~210-219-8858~~ (337) ~~Fax #:~~ 257-8307	Address:
Project #: 03C155818I Project Owner:	City: Carlsbad
Project Name: Row 2	State: Zip:
Project Location:	Phone #: ~~575-390-2828~~
Sampler Name: Kaory Shimada, Josh Boxley	Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	Chloride 4500
1245340																		
33	CS 40	0.5	C	1			X					X		9-3-24	1130	X	X	X
34	CS 41	1	1	1			X					X		1	1125	X	X	X
35	CS 42						X					X			1120	X	X	X
36	CS 43						X					X			1115	X	X	X
37	CS 44	0.5	C	1			X					X		9-3-24	1110	X	X	X

NV FF SK 9-3-24

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Relinquished By: Kaory Shimada	Date: 9.3.24 Time: 1650	Received By:	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: tmorrissey@ensolum.com
			REMARKS: Same Incident ID & 3 AFE Keys.
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.8 Corrected Temp. °C 2.2	Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)
			Turnaround Time: Standard ☒ Rush ☐ Thermometer ID #113 Correction Factor -0.5°C
			Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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September 09, 2024

TACOMA MORRISSEY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 2

Enclosed are the results of analyses for samples received by the laboratory on 09/05/24 14:40.

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

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/03/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: CS 28 0.5' (H245376-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.97	98.5	2.00	4.95	
Toluene*	<0.050	0.050	09/06/2024	ND	1.90	94.9	2.00	3.98	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.89	94.7	2.00	3.48	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	5.64	94.1	6.00	3.72	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**32.0**	16.0	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	196	98.0	200	6.56	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	199	99.4	200	9.39	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *95.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *132 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/03/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: CS 29 0.5' (H245376-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.97	98.5	2.00	4.95	
Toluene*	<0.050	0.050	09/06/2024	ND	1.90	94.9	2.00	3.98	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.89	94.7	2.00	3.48	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	5.64	94.1	6.00	3.72	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.6 %* *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	**1060**	16.0	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	196	98.0	200	6.56	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	199	99.4	200	9.39	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *92.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *128 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/03/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: CS 30 0.5' (H245376-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.97	98.5	2.00	4.95	
Toluene*	<0.050	0.050	09/06/2024	ND	1.90	94.9	2.00	3.98	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.89	94.7	2.00	3.48	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	5.64	94.1	6.00	3.72	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.3 %* *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	**16.0**	16.0	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	196	98.0	200	6.56	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	199	99.4	200	9.39	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *91.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *126 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/03/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: CS 31 0.5' (H245376-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.97	98.5	2.00	4.95	
Toluene*	<0.050	0.050	09/06/2024	ND	1.90	94.9	2.00	3.98	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.89	94.7	2.00	3.48	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	5.64	94.1	6.00	3.72	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**16.0**	16.0	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	196	98.0	200	6.56	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	199	99.4	200	9.39	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *87.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *122 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/03/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: CS 32 0.5' (H245376-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.97	98.5	2.00	4.95	
Toluene*	<0.050	0.050	09/06/2024	ND	1.90	94.9	2.00	3.98	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.89	94.7	2.00	3.48	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	5.64	94.1	6.00	3.72	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.4 %* *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	**32.0**	16.0	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	196	98.0	200	6.56	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	199	99.4	200	9.39	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *91.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *127 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/03/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: CS 33 0.5' (H245376-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.97	98.5	2.00	4.95	
Toluene*	<0.050	0.050	09/06/2024	ND	1.90	94.9	2.00	3.98	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.89	94.7	2.00	3.48	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	5.64	94.1	6.00	3.72	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**32.0**	16.0	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	196	98.0	200	6.56	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	199	99.4	200	9.39	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *85.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *120 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/03/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: CS 34 0.5' (H245376-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.97	98.5	2.00	4.95	
Toluene*	<0.050	0.050	09/06/2024	ND	1.90	94.9	2.00	3.98	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.89	94.7	2.00	3.48	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	5.64	94.1	6.00	3.72	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**16.0**	16.0	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	196	98.0	200	6.56	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	199	99.4	200	9.39	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *83.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *117 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: Tacoma Morrissey
Address: 3122 National Parks Hwy
City: Carlsbad State: NM Zip: 88220
Phone #: 337-257-8307 Fax #:
Project #: 03C1558181 Project Owner: XTO
Project Name: ROW 2
Project Location: 32.20581, -103.79574
Sampler Name: Joshua Boxley

BILL TO
P.O. #:
Company: XTO Energy Inc.
Attn: Amy Ruth
Address: 3104 E Green St
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	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chloride 4500	TPH 8015	BTEX 8021
H245376-1	CS28	0.5					X					X		9/3/24	15.25	X	X	X
2	CS29													9/3/24	1415	X	X	X
3	CS30													9/3/24	1410	X	X	X
4	CS31													9/3/24	1515	X	X	X
5	CS32													9/3/24	1400	X	X	X
6	CS33													9/3/24	1355	X	X	X
7	CS34	0.5					X					X		9/3/24	1520	X	X	X

Relinquished By: Date: 9.5.24 Time: 1405 Received By:
Relinquished By: Date: Time: Received By:

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

REMARKS:
Incident: NAPP2304148392
Cost Center:
AFEs: DD.2017.04407.CAP.CMP.01
DD.2017.04406.CAP.CMP.01
DD.2017.04378.CAP.CMP.01

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:
Observed Temp. °C 3.3
Corrected Temp. °C 2.6
Sample Condition: Cool Yes Intact Yes
CHECKED BY: (Initials) AJD

Turnaround Time: ☒ Standard ☐ Rush
2 DAY AP 9.5.24
Thermometer ID #113 #140
Correction Factor -0.6°C -0.6

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

CARDINAL Laboratories

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

September 09, 2024

TACOMA MORRISSEY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 2

Enclosed are the results of analyses for samples received by the laboratory on 09/05/24 14:40.

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

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/04/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: SW 01 0-4' (H245394-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.50	75.2	2.00	20.5	
Toluene*	<0.050	0.050	09/06/2024	ND	1.42	70.9	2.00	20.0	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.46	72.8	2.00	19.9	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	4.31	71.8	6.00	19.8	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.5 %* *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	**368**	16.0	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	193	96.3	200	0.474	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	186	93.0	200	2.12	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *119 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *121 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/04/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: SW 02 0-4' (H245394-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.50	75.2	2.00	20.5	
Toluene*	<0.050	0.050	09/06/2024	ND	1.42	70.9	2.00	20.0	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.46	72.8	2.00	19.9	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	4.31	71.8	6.00	19.8	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.0 %* *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	09/09/2024	ND	400	100	400	3.92	

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	09/06/2024	ND	193	96.3	200	0.474	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	186	93.0	200	2.12	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *117 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *122 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/04/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: SW 03 0-4' (H245394-03)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.50	75.2	2.00	20.5	
Toluene*	<0.050	0.050	09/06/2024	ND	1.42	70.9	2.00	20.0	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.46	72.8	2.00	19.9	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	4.31	71.8	6.00	19.8	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.9 %* *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	**240**	16.0	09/09/2024	ND	400	100	400	7.69	

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	09/06/2024	ND	193	96.3	200	0.474	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	186	93.0	200	2.12	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *127 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *129 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/04/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: SW 04 0-4' (H245394-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.50	75.2	2.00	20.5	
Toluene*	<0.050	0.050	09/06/2024	ND	1.42	70.9	2.00	20.0	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.46	72.8	2.00	19.9	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	4.31	71.8	6.00	19.8	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.4 %* *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	**48.0**	16.0	09/09/2024	ND	400	100	400	7.69	

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	09/06/2024	ND	193	96.3	200	0.474	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	186	93.0	200	2.12	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *123 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *131 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/04/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: SW 06 0-4' (H245394-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.50	75.2	2.00	20.5	
Toluene*	<0.050	0.050	09/06/2024	ND	1.42	70.9	2.00	20.0	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.46	72.8	2.00	19.9	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	4.31	71.8	6.00	19.8	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.2 %* *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	**128**	16.0	09/09/2024	ND	400	100	400	7.69	

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	09/06/2024	ND	196	98.1	200	2.65	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	191	95.4	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *109 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *128 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/05/2024	Sampling Date:	09/04/2024
Reported:	09/09/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.20581-103.79574		

Sample ID: SW 05 0-4' (H245394-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2024	ND	1.50	75.2	2.00	20.5	
Toluene*	<0.050	0.050	09/06/2024	ND	1.42	70.9	2.00	20.0	
Ethylbenzene*	<0.050	0.050	09/06/2024	ND	1.46	72.8	2.00	19.9	
Total Xylenes*	<0.150	0.150	09/06/2024	ND	4.31	71.8	6.00	19.8	
Total BTEX	<0.300	0.300	09/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.2 %* *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	**64.0**	16.0	09/09/2024	ND	400	100	400	7.69	

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	09/06/2024	ND	196	98.1	200	2.65	
DRO >C10-C28*	<10.0	10.0	09/06/2024	ND	191	95.4	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	09/06/2024	ND					

Surrogate: 1-Chlorooctane *104 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *121 %* *49.1-148*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Tacoma Morrissey	P.O. #:
Address: 3122 National Parks Hwy	Company: XTO Energy Inc.
City: Carlsbad State: NM Zip: 88220	Attn: Amy Ruth
Phone #: 337-257-8307 Fax #:	Address: 3104 E Green St
Project #: 03C1558181 Project Owner: XTO	City: Carlsbad
Project Name: ROW 2	State: NM Zip:88220
Project Location: 32.20581, -103.79574	Phone #:
Sampler Name: Joshua Boxley	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chloride 4500	TPH 8015	BTEX 8021
H245394																		
1	SW01	0-4'	C	1			X					X		9/4/24	1010	X	X	X
2	SW02														1140			
3	SW03														1245			
4	SW04														1325			
5	SW06														1555			
6	SW05	0-4'	C	1			X					X		9/4/24	1430	X	X	X

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 the client for the 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 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 9.5.24 Time: 1440	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
			All Results are emailed. Please provide Email address: TMorrissey@ensolum.com, bbeliil@ensolum.com
Relinquished By:	Date: Time:	Received By:	REMARKS: AFEs: DD.2017.04407.CAP.CMP.01 DD.2017.04406.CAP.CMP.01 DD.2017.04378.CAP.CMP.01 Incident: NAPP2304148392 Cost Center:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 33 Corrected Temp. °C 2.6	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) AP	Turnaround Time: 2 DAY 9.5.24 AP Standard Rush Thermometer ID #113 + 1.4 Correction Factor 0.5°C - 0.6

Bacteria (only) Sample Condition: ☐ Cool ☐ Intact ☐ Yes ☐ No — Observed Temp. °C — Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

CARDINAL Laboratories

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September 12, 2024

TACOMA MORRISSEY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 2

Enclosed are the results of analyses for samples received by the laboratory on 09/10/24 13:00.

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

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 01 3' (H245465-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.9 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *81.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *80.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 02 3' (H245465-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *87.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.2 %* *49.1-148*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 03 3' (H245465-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *96.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.9 %* *49.1-148*

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 04 3' (H245465-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.3 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *93.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.8 %* *49.1-148*

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 05 4' (H245465-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *92.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.1 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 06 3' (H245465-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *100 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *100 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 07 4' (H245465-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.9 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *85.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 08 3' (H245465-08)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.3 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *89.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 09 3' (H245465-09)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.7 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *84.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *82.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 10 3' (H245465-10)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.0 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	09/11/2024	ND	400	100	400	3.92	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *89.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.5 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 11 3' (H245465-11)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**64.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *87.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.9 %* *49.1-148*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 12 3' (H245465-12)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.1 %* *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	**64.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *88.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.4 %* *49.1-148*

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 13 3' (H245465-13)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.7 %* *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	**96.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *90.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.6 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 14 3' (H245465-14)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**96.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *84.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.8 %* *49.1-148*

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Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 15 3' (H245465-15)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.95	97.4	2.00	0.997	
Toluene*	<0.050	0.050	09/11/2024	ND	1.88	93.8	2.00	1.22	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	1.86	92.9	2.00	1.69	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	5.53	92.2	6.00	1.96	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *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	**96.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	189	94.3	200	5.78	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	185	92.6	200	5.80	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *88.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.5 %* *49.1-148*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 16 2' (H245465-16)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	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	**96.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *81.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.7 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 17 2' (H245465-17)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	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	**96.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *93.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *92.8 %* *49.1-148*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 18 2' (H245465-18)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**96.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *91.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.6 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 19 2' (H245465-19)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	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	**32.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *85.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 20 2' (H245465-20)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	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	**80.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *96.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *98.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: FS 21 2' (H245465-21)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**64.0**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *82.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.6 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: SW 08 0-3' (H245465-22)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	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	**112**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *78.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.3 %* *49.1-148*

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CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: SW 09 0-4' (H245465-23)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**176**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *88.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *92.8 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: SW 10 0-3' (H245465-24)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**176**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *78.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.9 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: SW 11 0-2' (H245465-25)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**192**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *87.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/09/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: SW 12 0-2' (H245465-26)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**176**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *78.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.7 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/10/2024	Sampling Date:	09/05/2024
Reported:	09/12/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20581,-103.79574		

Sample ID: SW 07 0-4' (H245465-27)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/11/2024	ND	1.96	98.2	2.00	5.23	
Toluene*	<0.050	0.050	09/11/2024	ND	2.03	101	2.00	2.81	
Ethylbenzene*	<0.050	0.050	09/11/2024	ND	2.02	101	2.00	1.43	
Total Xylenes*	<0.150	0.150	09/11/2024	ND	6.40	107	6.00	0.801	
Total BTEX	<0.300	0.300	09/11/2024	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	**144**	16.0	09/12/2024	ND	400	100	400	7.69	

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	09/11/2024	ND	203	101	200	0.760	
DRO >C10-C28*	<10.0	10.0	09/11/2024	ND	206	103	200	9.06	
EXT DRO >C28-C36	<10.0	10.0	09/11/2024	ND					

Surrogate: 1-Chlorooctane *86.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.4 %* *49.1-148*

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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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Tacoma Morrissey	P.O. #:
Address: 3122 National Parks Hwy	Company: XTO Energy Inc.
City: Carlsbad State: NM Zip: 88220	Attn: Amy Ruth
Phone #: 337-257-8307 Fax #:	Address: 3104 E Green St
Project #: 03C1558181 Project Owner: XTO	City: Carlsbad
Project Name: ROW 2	State: NM Zip:88220
Project Location: 32.20581, -103.79574	Phone #:
Sampler Name: Joshua Boxley	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride 4500	TPH 8015	BTEX 8021
H245405																		
1	FS01	3	C	1			X					X		9.9.24	1005	X	X	X
2	FS02	3													1008			
3	FS03	3													1011			
4	FS04	3													1014			
5	FS05	4													1017			
6	FS06	3													1105			
7	FS07	4													1110			
8	FS08	3													1115			
9	FS09	3													1120			
10	FS10	3	C	1			X					X		9.9.24	1125	X	X	X

Relinquished By:	Date: 9-10-24	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1300		All Results are emailed. Please provide Email address: TMorrissey@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS: AFEs: DD.2017.04407.CAP.CMP.01 DD.2017.04406.CAP.CMP.01 DD.2017.04378.CAP.CMP.01
	Time:		Incident: NAPP2304148392 Cost Center:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.3 / Corrected Temp. °C 0.7	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials)	Turnaround Time: 2 DAY Standard [X] Rush [ ] Thermometer ID #113 #140 Correction Factor 0.5°C -0.4

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Tacoma Morrissey	P.O. #:
Address: 3122 National Parks Hwy	Company: XTO Energy Inc.
City: Carlsbad State: NM Zip: 88220	Attn: Amy Ruth
Phone #: 337-257-8307 Fax #:	Address: 3104 E Green St
Project #: 03C1558181 Project Owner: XTO	City: Carlsbad
Project Name: ROW 2	State: NM Zip:88220
Project Location: 32.20581, -103.79574	Phone #:
Sampler Name: Joshua Boxley	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride 4500	TPH 8015	BTEX 8021
H245465																		
11	FS11	3	C	1			X					✓		9.9.24	1130	X	X	X
12	FS12														1135			
13	FS13														1140			
14	FS14														1305			
15	FS15	3													1308			
16	FS16	2													1405			
17	FS17														1408			
18	FS18														1412			
19	FS19														1505			
20	FS20	2	C	1			V					✓		9.9.24	1500	X	X	X

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 the client for the 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 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 9.10.24 Time: 1300	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: TMorrissey@ensolum.com

REMARKS:
Incident: NAPP2304148392
Cost Center:
AFEs: DD.2017.04407.CAP.CMP.01
DD.2017.04406.CAP.CMP.01
DD.2017.04378.CAP.CMP.01

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.3 Corrected Temp. °C 0.7	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials) SK	Turnaround Time: 2 DAY Thermometer ID #113 Correction Factor -0.6°C

Turnaround Time: Standard ☒ Rush ☐ #140 -0.6=2
Bacteria (only) Sample Condition: Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Tacoma Morrissey	P.O. #:
Address: 3122 National Parks Hwy	Company: XTO Energy Inc.
City: Carlsbad State: NM Zip: 88220	Attn: Amy Ruth
Phone #: 337-257-8307 Fax #:	Address: 3104 E Green St
Project #: 03C1558181 Project Owner: XTO	City: Carlsbad
Project Name: ROW 2	State: NM Zip:88220
Project Location: 32.20581, -103.79574	Phone #:
Sampler Name: Joshua Boxley	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chloride 4500	TPH 8015	BTEX 8021
H245465																		
21	FS21	2	C	1			X					X		9.9.24	1455	X	X	X
22	SW08	0-3													1145			
23	SW09	~~0-4~~ 0-4													1150			
24	SW10	0-3													1155			
25	SW11	0-2													1510			
26	SW12	0-2	C											9.9.24	1515			
27	SW07	0-4	C	1			X					X		9.5.24	1310	X	X	X

JDR

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Relinquished By:	Date: 9.10.24	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1300		All Results are emailed. Please provide Email address: TMorrissey@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS: Incident: NAPP2304148392 Cost Center: AFEs: DD.2017.04407.CAP.CMP.01 DD.2017.04406.CAP.CMP.01 DD.2017.04378.CAP.CMP.01
	Time:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.3 Corrected Temp. °C 0.0	Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) SR
			Turnaround Time: 2 DAY Standard ☒ Rush ☒ Thermometer ID #113 Correction Factor -0.5°C #113 -0.2
			Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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CARDINAL Laboratories

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

September 23, 2024

TACOMA MORRISSEY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 2

Enclosed are the results of analyses for samples received by the laboratory on 09/19/24 13:15.

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

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
TACOMA MORRISSEY
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	09/19/2024	Sampling Date:	09/13/2024
Reported:	09/23/2024	Sampling Type:	Soil
Project Name:	ROW 2	Sampling Condition:	Cool & Intact
Project Number:	03C1558181	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.20581,-103.79574		

Sample ID: CS 29 0.5 (H245700-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/20/2024	ND	2.12	106	2.00	1.74	
Toluene*	<0.050	0.050	09/20/2024	ND	2.07	104	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/20/2024	ND	2.16	108	2.00	0.165	
Total Xylenes*	<0.150	0.150	09/20/2024	ND	6.51	108	6.00	0.124	
Total BTEX	<0.300	0.300	09/20/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	09/20/2024	ND	400	100	400	3.92	

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	09/19/2024	ND	194	96.8	200	1.30	
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	198	99.0	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane *105 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC		**BILL TO**	
Project Manager: Tacoma Morrissey		P.O. #:	
Address: 3122 National Parks Hwy		Company: XTO Energy Inc.	
City: Carlsbad	State: NM Zip: 88220	Attn: Amy Ruth	
Phone #: 337-257-8307	Fax #:	Address: 3104 E Green St	
Project #: 03C1558181	Project Owner: XTO	City: Carlsbad	
Project Name: ROW 2		State: NM Zip:88220	
Project Location: 32.20581, -103.79574		Phone #:	
Sampler Name: Joshua Boxley		Fax #:	

FOR LAB USE ONLY					MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
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	Chloride 4500	TPH 8015	BTEX 8021								
H245700																										
1	CS29	0.5	C	1			X					X		9.13.24	1530	X	X	X								

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Relinquished By:	Date: 9-19-24	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1315		All Results are emailed. Please provide Email address: TMorrissey@ensolum.com, kthomason@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS: AFEs: DD.2017.04407.CAP.CMP.01 DD.2017.04406.CAP.CMP.01 DD.2017.04378.CAP.CMP.01
	Time:		Incident: NAPP2304148392 Cost Center:

Delivered By: (Circle One)	Observed Temp. °C 1.7	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☒ Rush ☒	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
Sampler - UPS - Bus - Other:	Corrected Temp. °C 1.1	☑ Yes ☑ Yes ☐ No ☐ No	TO	2 DAY ☐ Thermometer ID #113 Correction Factor -0.6°C	☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

TO - 9/19/24

FORM-006 R 3.2 10/07/21

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ENSOLUM

APPENDIX D

August 17, 2023 *Closure Request*

Closure:

PLUG 17

Eddy County, New Mexico

G-24-24S-30E

Prepared For:

Qwik Pipe

One Lincoln Center

Dallas, TX 75240

Prepared By:

BDS Enterprises

1705 E Greene St.

Carlsbad, NM 88220

August 15, 2023

Qwik Pipe
August 15, 2023

Site Information

On January 28, 2023, a release occurred on the Plug 17 ROW 2 site when an above ground line was found leaking. Due to human error site personnel failed to open a valve which caused a failure in the lay flat line resulting in fluids released to soil. The release was estimated to be 144.49 bbls., a Hydro vac was dispatched and recovered 60 bbls. A C-141 spill notification was submitted to the NMOCD and assigned **Incident No. NAPP2304148392** Appendix 1. The Plug 17 is located in Rural Eddy County at the coordinates (32.205688, -103.795732), approximately 29 miles Southeast of Carlsbad, NM.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Berino complex with 0 to 3 percent slopes and a depth to restrictive feature of more than 80 inches. Per the New Mexico Bureau of Geology and Mineral Resources, the local geology consists of eolian and piedmont deposits, Holocene to middle Pleistocene in age, and composed of inter-layed eolian sands and piedmont-slope deposits. The soil characterization for this site contains a certain level of natural salinity (2.0 to 4.0 mmhos/cm). Drainage courses in this area are typically well drained Appendix III.

Ground Water and Site Characterization

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 111 feet below ground surface (bgs). The referenced POD of C 04499 POD 1meets the criteria of established Table 1 clean-up criteria. Further research of the Bureau of Land Management Karst data indicates that this site is located within a low range potential Karst area Appendix III.

Site Assessment

On March 14, 2023, BDS Enterprise personnel mobilized to the site to conduct an initial site assessment. The impacted area was mapped with a Trimble Geoexplorer 6000 series and sampled using a hand auger. All soil samples were properly packaged, preserved, and transported to a Hall Laboratory Representative via chain of custody for analysis of Total Chlorides (EPA Method 300.0), TPH (EPA Method 8015M/D and EPA Method 8015D), and BTEX (EPA Method 8021B). Sample Locations are shown in Appendix II. and the results of our assessment sampling event are presented on Table 1. Full laboratory reports can be referenced in Appendix V

Qwik Pipe
August 15, 2023

Table 1

3/14/2023 Sample Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	GRO + DRO + MRO combined = 1000 mg/kg			2,500 mg/kg	20,000 mg/kg
S-1	3/14/2023	0-1'	ND	ND	ND	ND	ND	0	2800
	3/14/2023	2'	ND	ND	ND	ND	ND	0	1700
	3/14/2023	3'	ND	ND	ND	ND	ND	0	1300
	3/14/2023	4'	ND	ND	ND	ND	ND	0	330
S-2	3/14/2023	0-1'	ND	ND	ND	ND	ND	0	4100
	3/14/2023	2' R	ND	ND	ND	ND	ND	0	5300
S-3	3/14/2023	0-1'	ND	ND	ND	ND	ND	0	3700
	3/14/2023	2'	ND	ND	ND	ND	ND	0	380
	3/14/2023	3' R	ND	ND	ND	ND	ND	0	ND
S-4	3/14/2023	0-1'	ND	ND	ND	ND	ND	0	2500
	3/14/2023	2'	ND	ND	ND	ND	ND	0	3500
	3/14/2023	3' R	ND	ND	ND	ND	ND	0	3000
BG-1	3/14/2023	0'	ND	ND	ND	ND	ND	0	ND
BG-2	3/14/2023	0'	ND	ND	ND	ND	ND	0	360
BG-3	3/14/2023	0'	ND	ND	ND	ND	ND	0	180
BG-4	3/14/2023	0'	ND	ND	ND	ND	ND	0	270
BG = Background Sample ND = Analyte Not Detected R = Refusal with Hand Auger									

On May 2, 2023, based on the laboratory results from the initial site assessment and upon client authorization, BDS Enterprises personnel and equipment were mobilized to the site in order to complete the vertical delineation. Using a geo-probe with geo-push technology we advanced sample positions S-2 and S-4. On sample position BH-2 (S-2) we encountered hard rock refusal at 6 feet below ground surface (bgs). The geo-probe was then mobilized to sample position S-4, labeled as BH-4. Borehole positions will be included on the site map in Appendix II.

Table II:

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	GRO + DRO + MRO combined = 100 mg/kg			2,500 mg/kg	10,000 mg/kg
BH-2	5/2/2023	4'	NT	NT	NT	NT	NT	0	1000
	5/2/2023	6' R	NT	NT	NT	NT	NT	0	2600
BH-4	5/2/2023	5' R	NT	NT	NT	NT	NT	0	160
BH = Borehole Sample, NT = Analyte Not Tested, R = Refusal with hand auger									

Qwik Pipe
August 15, 2023

On May 23, 2023 the following Scope of Work was submitted to the BLM (Bureau of Land Management) for approval. Permission was granted to proceed with Remedial Activity with exception that the liner not be installed. The BLM concluded that due to high pressure lines seated at 4.5 ft. bgs., and outstanding permits issued for additional lines to be installed that it would not be practicable or safe to install a liner. A copy of BLM correspondence can be referenced in Appendix VI.

On June 02, through June 12, 2023 respectively, BDS personnel and equipment had completed excavation of the impacted area. The NMOCD was notified of a 48-hour confirmation sampling event. Utilizing field titration data to guide the excavation, the impacted area was excavated from depths of 2 ft. bgs. to 4 ft bgs. Confirmation samples were taken on a 5-pont composite basis every 200 sq. ft. All soil was properly contained, preserved, and transported to Hall Laboratories for analysis of Chloride, TPH and BTEX. The results are tabled below. A full laboratory report can be referenced in Table V.

Table III Confirmation:

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	GRO + DRO + MRO combined = 100 mg/kg			100 mg/kg	10,000 mg/kg
S-1A	6/2/2023	4'	NT	NT	NT	NT	NT	0	660
S-2A	6/2/2023	4'	NT	NT	NT	NT	NT	0	1300
S-3A	6/2/2023	2'	NT	NT	NT	NT	NT	0	170
S-4A	6/2/2023	4'	NT	NT	NT	NT	NT	0	1500
S-5A	6/2/2023	2'	NT	NT	NT	NT	NT	0	1200
S-6A	6/2/2023	2'	NT	NT	NT	NT	NT	0	710
S-7A	6/2/2023	2'	NT	NT	NT	NT	NT	0	610
S-8A	6/2/2023	2'	NT	NT	NT	NT	NT	0	710
S-9A	6/12/2023	2'	ND	ND	ND	19	ND	19	69
S-10A	6/12/2023	2'	ND	ND	ND	20	ND	20	ND
S-11A	6/12/2023	2'	ND	ND	ND	12	ND	12	ND
S-12A	6/12/2023	2'	ND	ND	ND	12	ND	12	ND
S-13A	6/12/2023	2'	ND	ND	ND	ND	ND	0	80
S-14A	6/12/2023	2'	ND	ND	ND	ND	ND	0	120
S-15A	6/12/2023	2'	ND	ND	ND	ND	ND	0	ND
S-16A	6/12/2023	2'	ND	ND	ND	ND	ND	0	ND
S-17A	6/12/2023	4'	ND	ND	ND	ND	ND	0	290
S-18A	6/12/2023	4'	ND	ND	ND	ND	ND	0	260
S-19A	6/12/2023	4'	ND	ND	ND	ND	ND	0	440
S-20A	6/12/2023	4'	ND	ND	ND	ND	ND	0	250
S-21A	6/12/2023	4'	ND	ND	ND	ND	ND	0	270

Continued

Qwik Pipe
August 15, 2023

S-22A	6/12/2023	4'	ND	ND	ND	ND	ND	0	260
S-23A	6/12/2023	4'	ND	ND	ND	ND	ND	0	270
S-24A	6/12/2023	4'	ND	ND	ND	ND	ND	0	200
S-25A	6/12/2023	4'	ND	ND	ND	ND	ND	0	210
S-26A	6/12/2023	4'	ND	ND	ND	ND	ND	0	290
S-27A	6/12/2023	4'	ND	ND	ND	ND	ND	0	380
S-28A	6/12/2023	4'	ND	ND	ND	ND	ND	0	420
S-29A	6/12/2023	4'	ND	ND	ND	ND	ND	0	370
S-30A	6/12/2023	4'	ND	ND	ND	ND	ND	0	820
SW-1	6/2/2023		NT	NT	NT	NT	NT	0	590
SW-2	6/2/2023		NT	NT	NT	NT	NT	0	160
SW-3	6/2/2023		NT	NT	NT	NT	NT	0	ND
SW-4	6/2/2023		NT	NT	NT	NT	NT	0	ND
SW-5	6/2/2023		NT	NT	NT	NT	NT	0	280
SW-6	6/2/2023		NT	NT	NT	NT	NT	0	ND
NT = Analyte Not Tested, ND = Analyte Not Detected, SW = Sidewall Sample									

Qwik Pipe
August 15, 2023

On July 14, 2023 Exxon Mobile personnel requested that additional confirmation sampling be conducted of the horizontal extent for the impacted area as it was originally mapped. It is believed that the horizontal extent of impact to surface area was minimized due to the immediate dispatch of a hydrovac and removal of surface fluids.

On August 07, 2023 BFD personnel returned to the site in order to collect the additional background soil samples as per the request of Exxon Mobile personnel. Three (3) additional samples were taken and labeled to coordinate with the GPS coordinates requested. All samples were properly grabbed, contained, and preserved for transport to Hall Laboratories. The soil samples were analyzed for Chloride, TPH, and BTEX. The results are tabled below for ease of reference. The complete laboratory report can be viewed in Appendix V.

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	GRO + DRO + MRO combined = 100 mg/kg			2,500 mg/kg	10,000 mg/kg
S 528A	8/7/2023	0-6”	ND	ND	ND	ND	ND	0	ND
S 522A	8/7/2023	0-6”	ND	ND	ND	ND	ND	0	ND
S 520A	8/7/2023	0-6”	ND	ND	ND	ND	ND	0	ND
A = Confirmation Sample, ND = Analyte Not Detected									

Scope of Work

- The area of S-1, S-2 and S-4 were excavated to 4 feet (bgs). Composite soil samples were taken from bottom of the excavation to confirm chloride levels being left in place; horizontal sidewall samples were retrieved to confirm the achievement of clean up criteria in accordance with NMOCD Table I standards. BLM declined permission for liner installation due to future permits.
- The area of S-3 was excavated to a depth of 2 feet.
- The vicinity of S-4 was excavated to 4 feet (bgs). Soil samples were taken to show chloride levels left in place at the depth of 4 foot (bgs) and horizontal sidewall samples were taken accordance with NMOCD Table I standards.

On May 29, 2023 BDS equipment, and personnel were mobilized to the site. In accordance with BLM permission: the area of S-3 has been excavated to a depth of 2 ft. bgs. The remaining impacted area, in accordance with BLM instruction has been excavated to 4 ft. bgs. The impacted area has been excavated to the horizontal extent that sidewalls have analyte levels that are “non-detect”. The clean stockpiled soil has been field titrated and all of the stockpiles are clean.

Qwik Pipe
August 15, 2023

BDS Enterprises is respectfully requesting permission to backfill the excavation due to safety concerns, followed by seeding in accordance with B LM guidelines. That furthermore, the regulatory file with regards to this incident be closed.

Appendix I	C-141 Spill Notification
Appendix II	Site Maps
Appendix III	Groundwater Data, Soil Survey, Wetlands Map
Appendix IV	Photographic Documentation
Appendix V	Laboratory Data
Appendix Vl	Correspondence BLM, and NMOCD

Appendix I

NMOCD

C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2304148392
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.20566 Longitude -103.79570
(NAD 83 in decimal degrees to 5 decimal places)

Site Name ROW 2	Site Type Pipeline
Date Release Discovered 01/28/2023	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
G	20	24S	31E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 144.49	Volume Recovered (bbls) 60.00
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Water transfer company failed to open a valve which caused a failure in the lay flat line, releasing fluids to soil. A third-party contractor has been retained for remediation purposes.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2304148392
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release greater than 25 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, by Garrett Green to ocd.enviro@emnrd.nm.gov; Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRDHarimon, Jocelyn, EMNRD on 1/29/2023 via email.

Initial Response

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

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

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

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

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

Printed Name: Garrett Green
Title: SSHE Coordinator
Signature: 
Date: 02/10/2023
email: garrett.green@exxonmobil.com
Telephone: 575-200-0729

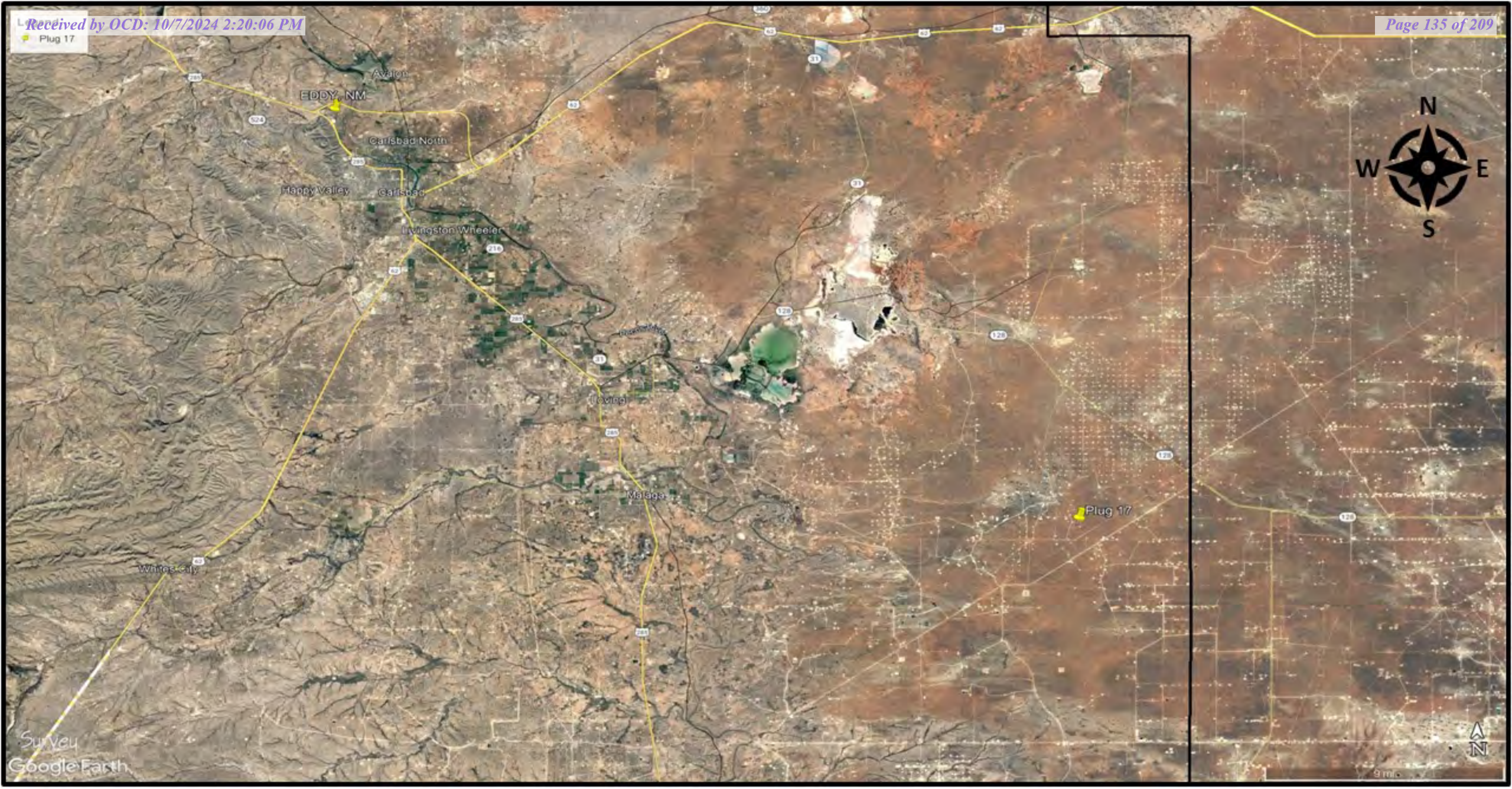
OCD Only

Received by: Jocelyn Harimon
Date: 02/10/2023

Location:	**ROW 2 Pipeline**	
Spill Date:	**1/28/2023**	
Area 1		
Approximate Area =	18976.00	sq. ft.
Average Saturation (or depth) of spill =	2.00	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	144.49	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**144.49**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**60.00**	**bbls**

Appendix II

Site Maps



Quik Pipe
Plug 17

Eddy County, NM

Location Map

Quik Pipe
Plug 17

Eddy County, NM

Karst Map

Quik Pipe
Plug 17

Eddy County, NM

Topography Map

Qwik Pipe
Plug 17

Eddy County, NM

Site Assessment Map

Quik Pipe
Plug 17

Eddy County, NM

BoreholeMap

Qwik Pipe
Plug 17

Eddy County, NM

Confirmation Map

Additional
Background Samples

32.205528, -103.796550
32.205522, -103.796187
32.205520, -103.795903

Survey
Google Earth

N

100 ft

Appendix III

Groundwater Data, Soil Survey, & Wetlands Map

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 04499 POD1		CUB	ED	3	4	2	20	24S	31E	613719	3563732	333	111		
C 04508 POD1		CUB	ED	4	4	3	15	24S	31E	616298	3564493	2919	110		

Average Depth to Water: --
Minimum Depth: --
Maximum Depth: --

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 613437 **Northing (Y):** 3563910.32 **Radius:** 3000

2/1/23 3:29 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04499 POD1	3	4	2	20	24S	31E	613719	3563732

Driller License: 1249 **Driller Company:** ATKINS ENGINEERING ASSOC. INC.

Driller Name: ATKINS, JACKIE D.UELENER

Drill Start Date:	12/30/2020	**Drill Finish Date:**	12/30/2020	**Plug Date:**	01/19/2021
Log File Date:	01/27/2021	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	111 feet	**Depth Water:**	

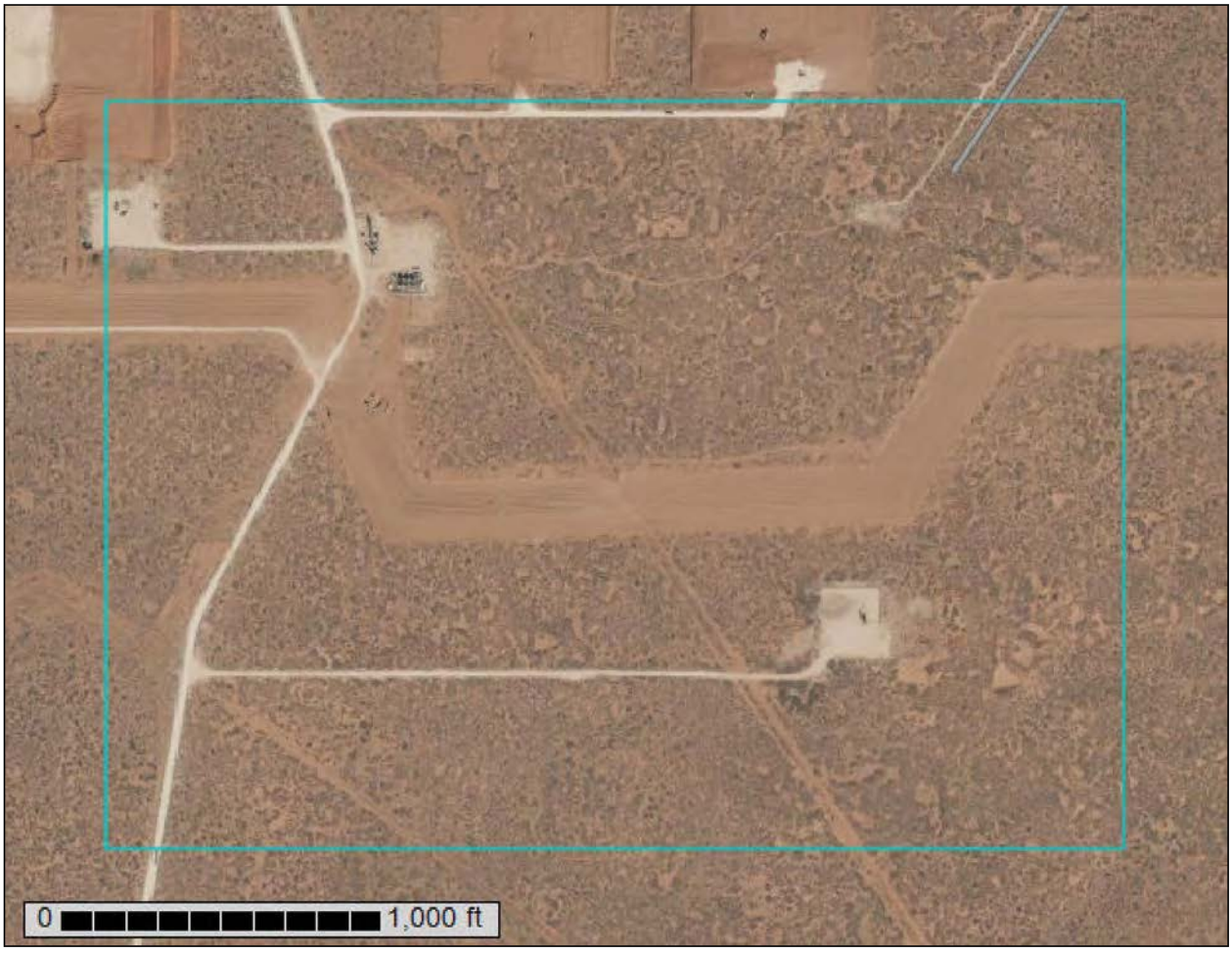
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eddy Area, New Mexico



February 1, 2023

Custom Soil Resource Report
Soil Map

Map Scale: 1:6,020 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Eddy Area, New Mexico

BB—Berino complex, 0 to 3 percent slopes, eroded

Map Unit Setting

National map unit symbol: 1w43
Elevation: 2,000 to 5,700 feet
Mean annual precipitation: 5 to 15 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 60 percent
Pajarito and similar soils: 25 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berino

Setting

Landform: Plains, fan piedmonts
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 17 inches: fine sand
H2 - 17 to 58 inches: sandy clay loam
H3 - 58 to 60 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Description of Pajarito

Setting

Landform: Dunes, plains, interdunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 9 inches: loamy fine sand
H2 - 9 to 72 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Pajarito

Percent of map unit: 4 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Wink

Percent of map unit: 4 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Cacique

Percent of map unit: 4 percent
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Kermit

Percent of map unit: 3 percent
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

KM—Kermit-Berino fine sands, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w4q
Elevation: 3,100 to 4,200 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 190 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 50 percent
Berino and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kermit

Setting

Landform: Plains, alluvial fans
Landform position (three-dimensional): Talf, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 7 inches: fine sand
H2 - 7 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

Description of Berino

Setting

Landform: Plains, fan piedmonts
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 17 inches: fine sand
H2 - 17 to 50 inches: fine sandy loam
H3 - 50 to 58 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Active dune land

Percent of map unit: 15 percent
Hydric soil rating: No

National Flood Hazard Layer FIRMette

FEMA

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 — Cross Sections with 1% Annual Chance
- 17.5 — Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/1/2023 at 5:37 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix IV

Photographic Documentation

Qwik Pipe
Plug 17

Impacted area at time of release.

Impacted area at time of release.

Aerial of Impacted area.

Aerial of Impacted area.

Qwik Pipe
Plug 17

Hydro-vac to expose lines

Hydro-vac to expose lines

Aerial of excavation

Aerial of excavation.

Appendix V

Laboratory Data

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 24, 2023

Rebecca Pons
BDS Enterprises
1705 E Greene St
Carlsbad, NM 88220
TEL: (575) 441-0980
FAX:

RE: Plug 17 OrderNo.: 2303844

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 16 sample(s) on 3/16/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-1 0-1'
Project: Plug 17
Collection Date: 3/14/2023 10:00:00 AM
Lab ID: 2303844-001 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/20/2023 7:13:26 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/20/2023 7:13:26 PM
Surr: DNOP	106	69-147		%Rec	1	3/20/2023 7:13:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/18/2023 6:14:11 AM
Surr: BFB	96.7	37.7-212		%Rec	1	3/18/2023 6:14:11 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/18/2023 6:14:11 AM
Toluene	ND	0.048		mg/Kg	1	3/18/2023 6:14:11 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/18/2023 6:14:11 AM
Xylenes, Total	ND	0.095		mg/Kg	1	3/18/2023 6:14:11 AM
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	3/18/2023 6:14:11 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	2800	150		mg/Kg	50	3/20/2023 5:21:20 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-1 2'
Project: Plug 17
Collection Date: 3/14/2023 10:03:00 AM
Lab ID: 2303844-002 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/20/2023 7:37:35 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/20/2023 7:37:35 PM
Surr: DNOP	105	69-147		%Rec	1	3/20/2023 7:37:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/18/2023 6:37:34 AM
Surr: BFB	97.3	37.7-212		%Rec	1	3/18/2023 6:37:34 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/18/2023 6:37:34 AM
Toluene	ND	0.048		mg/Kg	1	3/18/2023 6:37:34 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/18/2023 6:37:34 AM
Xylenes, Total	ND	0.095		mg/Kg	1	3/18/2023 6:37:34 AM
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	3/18/2023 6:37:34 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	1700	60		mg/Kg	20	3/18/2023 12:15:58 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-1 3'
Project: Plug 17
Collection Date: 3/14/2023 10:06:00 AM
Lab ID: 2303844-003 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/20/2023 8:01:51 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/20/2023 8:01:51 PM
Surr: DNOP	108	69-147		%Rec	1	3/20/2023 8:01:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/18/2023 7:00:55 AM
Surr: BFB	97.4	37.7-212		%Rec	1	3/18/2023 7:00:55 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	3/18/2023 7:00:55 AM
Toluene	ND	0.046		mg/Kg	1	3/18/2023 7:00:55 AM
Ethylbenzene	ND	0.046		mg/Kg	1	3/18/2023 7:00:55 AM
Xylenes, Total	ND	0.092		mg/Kg	1	3/18/2023 7:00:55 AM
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	3/18/2023 7:00:55 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	1300	60		mg/Kg	20	3/18/2023 12:28:19 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-1 4'
Project: Plug 17
Collection Date: 3/14/2023 10:09:00 AM
Lab ID: 2303844-004 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/20/2023 8:25:54 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/20/2023 8:25:54 PM
Surr: DNOP	97.9	69-147		%Rec	1	3/20/2023 8:25:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/18/2023 7:24:22 AM
Surr: BFB	95.2	37.7-212		%Rec	1	3/18/2023 7:24:22 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/18/2023 7:24:22 AM
Toluene	ND	0.048		mg/Kg	1	3/18/2023 7:24:22 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/18/2023 7:24:22 AM
Xylenes, Total	ND	0.097		mg/Kg	1	3/18/2023 7:24:22 AM
Surr: 4-Bromofluorobenzene	91.5	70-130		%Rec	1	3/18/2023 7:24:22 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	330	60		mg/Kg	20	3/18/2023 12:40:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-2 0-1'
Project: Plug 17
Collection Date: 3/14/2023 10:15:00 AM
Lab ID: 2303844-005 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/20/2023 8:50:11 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/20/2023 8:50:11 PM
Surr: DNOP	99.7	69-147		%Rec	1	3/20/2023 8:50:11 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/18/2023 7:47:55 AM
Surr: BFB	96.0	37.7-212		%Rec	1	3/18/2023 7:47:55 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/18/2023 7:47:55 AM
Toluene	ND	0.048		mg/Kg	1	3/18/2023 7:47:55 AM
Ethylbenzene	ND	0.048		mg/Kg	1	3/18/2023 7:47:55 AM
Xylenes, Total	ND	0.097		mg/Kg	1	3/18/2023 7:47:55 AM
Surr: 4-Bromofluorobenzene	91.7	70-130		%Rec	1	3/18/2023 7:47:55 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	4100	150		mg/Kg	50	3/20/2023 5:33:41 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-2 2' R
Project: Plug 17
Collection Date: 3/14/2023 10:18:00 AM
Lab ID: 2303844-006 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	3/20/2023 9:14:17 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	3/20/2023 9:14:17 PM
Surr: DNOP	101	69-147		%Rec	1	3/20/2023 9:14:17 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/18/2023 8:11:25 AM
Surr: BFB	95.7	37.7-212		%Rec	1	3/18/2023 8:11:25 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	3/18/2023 8:11:25 AM
Toluene	ND	0.050		mg/Kg	1	3/18/2023 8:11:25 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/18/2023 8:11:25 AM
Xylenes, Total	ND	0.099		mg/Kg	1	3/18/2023 8:11:25 AM
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	3/18/2023 8:11:25 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	5300	150		mg/Kg	50	3/21/2023 10:09:59 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-3 0-1'
Project: Plug 17
Collection Date: 3/14/2023 10:25:00 AM
Lab ID: 2303844-007 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/20/2023 9:38:26 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/20/2023 9:38:26 PM
Surr: DNOP	99.4	69-147		%Rec	1	3/20/2023 9:38:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/18/2023 8:34:53 AM
Surr: BFB	95.5	37.7-212		%Rec	1	3/18/2023 8:34:53 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	3/18/2023 8:34:53 AM
Toluene	ND	0.049		mg/Kg	1	3/18/2023 8:34:53 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/18/2023 8:34:53 AM
Xylenes, Total	ND	0.099		mg/Kg	1	3/18/2023 8:34:53 AM
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	3/18/2023 8:34:53 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	3700	150		mg/Kg	50	3/21/2023 10:22:20 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-3 2'
Project: Plug 17
Collection Date: 3/14/2023 10:28:00 AM
Lab ID: 2303844-008 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/20/2023 10:02:40 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/20/2023 10:02:40 PM
Surr: DNOP	96.6	69-147		%Rec	1	3/20/2023 10:02:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/18/2023 8:58:20 AM
Surr: BFB	96.9	37.7-212		%Rec	1	3/18/2023 8:58:20 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/18/2023 8:58:20 AM
Toluene	ND	0.049		mg/Kg	1	3/18/2023 8:58:20 AM
Ethylbenzene	ND	0.049		mg/Kg	1	3/18/2023 8:58:20 AM
Xylenes, Total	ND	0.098		mg/Kg	1	3/18/2023 8:58:20 AM
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	3/18/2023 8:58:20 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	380	60		mg/Kg	20	3/20/2023 10:54:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-3 3' R
Project: Plug 17
Collection Date: 3/14/2023 10:31:00 AM
Lab ID: 2303844-009 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/21/2023 12:23:12 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/21/2023 12:23:12 PM
Surr: DNOP	92.8	69-147		%Rec	1	3/21/2023 12:23:12 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/20/2023 1:02:06 PM
Surr: BFB	105	37.7-212		%Rec	1	3/20/2023 1:02:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/20/2023 1:02:06 PM
Toluene	ND	0.049		mg/Kg	1	3/20/2023 1:02:06 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/20/2023 1:02:06 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/20/2023 1:02:06 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	3/20/2023 1:02:06 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	3/20/2023 11:07:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-4 0-1'
Project: Plug 17
Collection Date: 3/14/2023 10:40:00 AM
Lab ID: 2303844-010 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/21/2023 12:33:42 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/21/2023 12:33:42 PM
Surr: DNOP	92.8	69-147		%Rec	1	3/21/2023 12:33:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/20/2023 1:25:53 PM
Surr: BFB	103	37.7-212		%Rec	1	3/20/2023 1:25:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	3/20/2023 1:25:53 PM
Toluene	ND	0.050		mg/Kg	1	3/20/2023 1:25:53 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/20/2023 1:25:53 PM
Xylenes, Total	ND	0.099		mg/Kg	1	3/20/2023 1:25:53 PM
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	3/20/2023 1:25:53 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	2500	150		mg/Kg	50	3/21/2023 10:34:41 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-4 2'
Project: Plug 17
Collection Date: 3/14/2023 10:43:00 AM
Lab ID: 2303844-011 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/21/2023 12:44:14 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/21/2023 12:44:14 PM
Surr: DNOP	94.4	69-147		%Rec	1	3/21/2023 12:44:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/20/2023 1:49:45 PM
Surr: BFB	103	37.7-212		%Rec	1	3/20/2023 1:49:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	3/20/2023 1:49:45 PM
Toluene	ND	0.049		mg/Kg	1	3/20/2023 1:49:45 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/20/2023 1:49:45 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/20/2023 1:49:45 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%Rec	1	3/20/2023 1:49:45 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	3500	150		mg/Kg	50	3/21/2023 10:47:02 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S-4 3' R
Project: Plug 17
Collection Date: 3/14/2023 10:46:00 AM
Lab ID: 2303844-012 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/21/2023 12:54:47 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/21/2023 12:54:47 PM
Surr: DNOP	95.9	69-147		%Rec	1	3/21/2023 12:54:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/20/2023 3:49:15 PM
Surr: BFB	104	37.7-212		%Rec	1	3/20/2023 3:49:15 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/20/2023 3:49:15 PM
Toluene	ND	0.049		mg/Kg	1	3/20/2023 3:49:15 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/20/2023 3:49:15 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/20/2023 3:49:15 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	3/20/2023 3:49:15 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	3000	150		mg/Kg	50	3/21/2023 10:59:23 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: BG-1 0'
Project: Plug 17
Collection Date: 3/14/2023 10:50:00 AM
Lab ID: 2303844-013 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/21/2023 1:05:20 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/21/2023 1:05:20 PM
Surr: DNOP	99.1	69-147		%Rec	1	3/21/2023 1:05:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/20/2023 4:13:09 PM
Surr: BFB	105	37.7-212		%Rec	1	3/20/2023 4:13:09 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.025		mg/Kg	1	3/20/2023 4:13:09 PM
Toluene	ND	0.049		mg/Kg	1	3/20/2023 4:13:09 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/20/2023 4:13:09 PM
Xylenes, Total	ND	0.098		mg/Kg	1	3/20/2023 4:13:09 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	3/20/2023 4:13:09 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	3/20/2023 11:56:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: BG-2 0'
Project: Plug 17
Collection Date: 3/14/2023 10:55:00 AM
Lab ID: 2303844-014 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	3/21/2023 1:15:54 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/21/2023 1:15:54 PM
Surr: DNOP	101	69-147		%Rec	1	3/21/2023 1:15:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/20/2023 5:24:28 PM
Surr: BFB	104	37.7-212		%Rec	1	3/20/2023 5:24:28 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/20/2023 5:24:28 PM
Toluene	ND	0.048		mg/Kg	1	3/20/2023 5:24:28 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/20/2023 5:24:28 PM
Xylenes, Total	ND	0.096		mg/Kg	1	3/20/2023 5:24:28 PM
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	3/20/2023 5:24:28 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	360	60		mg/Kg	20	3/21/2023 12:08:43 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: BG-3 0'
Project: Plug 17
Collection Date: 3/14/2023 11:00:00 AM
Lab ID: 2303844-015 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/21/2023 1:26:31 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/21/2023 1:26:31 PM
Surr: DNOP	98.4	69-147		%Rec	1	3/21/2023 1:26:31 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/20/2023 5:48:16 PM
Surr: BFB	116	37.7-212		%Rec	1	3/20/2023 5:48:16 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.023		mg/Kg	1	3/20/2023 5:48:16 PM
Toluene	ND	0.047		mg/Kg	1	3/20/2023 5:48:16 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/20/2023 5:48:16 PM
Xylenes, Total	ND	0.093		mg/Kg	1	3/20/2023 5:48:16 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%Rec	1	3/20/2023 5:48:16 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	180	60		mg/Kg	20	3/21/2023 12:45:45 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303844**
Date Reported: **3/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: BG-4 0'
Project: Plug 17
Collection Date: 3/14/2023 11:05:00 AM
Lab ID: 2303844-016 **Matrix:** SOIL **Received Date:** 3/16/2023 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/21/2023 1:37:10 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/21/2023 1:37:10 PM
Surr: DNOP	103	69-147		%Rec	1	3/21/2023 1:37:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/20/2023 6:12:00 PM
Surr: BFB	103	37.7-212		%Rec	1	3/20/2023 6:12:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	3/20/2023 6:12:00 PM
Toluene	ND	0.048		mg/Kg	1	3/20/2023 6:12:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	3/20/2023 6:12:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	3/20/2023 6:12:00 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	3/20/2023 6:12:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	270	60		mg/Kg	20	3/21/2023 12:58:05 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303844**

24-Mar-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **MB-73789**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **73789**	RunNo: **95382**
Prep Date: **3/18/2023**	Analysis Date: **3/18/2023**	SeqNo: **3450256** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-73789**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **73789**	RunNo: **95382**
Prep Date: **3/18/2023**	Analysis Date: **3/18/2023**	SeqNo: **3450257** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Sample ID: **MB-73818**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **73818**	RunNo: **95410**
Prep Date: **3/20/2023**	Analysis Date: **3/20/2023**	SeqNo: **3451749** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-73818**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **73818**	RunNo: **95410**
Prep Date: **3/20/2023**	Analysis Date: **3/20/2023**	SeqNo: **3451750** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303844**

24-Mar-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **MB-73780**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **73780**	RunNo: **95386**
Prep Date: **3/17/2023**	Analysis Date: **3/20/2023**	SeqNo: **3450480** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		99.6	69	147			

Sample ID: **LCS-73780**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **73780**	RunNo: **95386**
Prep Date: **3/17/2023**	Analysis Date: **3/20/2023**	SeqNo: **3450495** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.0	61.9	130			
Surr: DNOP	5.1		5.000		102	69	147			

Sample ID: **MB-73819**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **73819**	RunNo: **95415**
Prep Date: **3/20/2023**	Analysis Date: **3/21/2023**	SeqNo: **3451853** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		92.0	69	147			

Sample ID: **LCS-73819**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **73819**	RunNo: **95415**
Prep Date: **3/20/2023**	Analysis Date: **3/21/2023**	SeqNo: **3451856** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.8	61.9	130			
Surr: DNOP	5.0		5.000		99.7	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303844**

24-Mar-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **lcs-73767**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **73767**	RunNo: **95348**
Prep Date: **3/16/2023**	Analysis Date: **3/17/2023**	SeqNo: **3449933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.6	70	130			
Surr: BFB	1800		1000		179	37.7	212			

Sample ID: **mb-73767**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **73767**	RunNo: **95348**
Prep Date: **3/16/2023**	Analysis Date: **3/17/2023**	SeqNo: **3449934** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.2	37.7	212			

Sample ID: **lcs-73777**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **73777**	RunNo: **95394**
Prep Date: **3/17/2023**	Analysis Date: **3/20/2023**	SeqNo: **3451025** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.9	70	130			
Surr: BFB	1900		1000		189	37.7	212			

Sample ID: **mb-73777**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **73777**	RunNo: **95394**
Prep Date: **3/17/2023**	Analysis Date: **3/20/2023**	SeqNo: **3451026** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	37.7	212			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303844**

24-Mar-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **LCS-73767**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **73767**	RunNo: **95348**
Prep Date: **3/16/2023**	Analysis Date: **3/17/2023**	SeqNo: **3449967** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.2	80	120			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.0	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	70	130			

Sample ID: **mb-73767**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **73767**	RunNo: **95348**
Prep Date: **3/16/2023**	Analysis Date: **3/17/2023**	SeqNo: **3449968** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		92.2	70	130			

Sample ID: **LCS-73777**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **73777**	RunNo: **95394**
Prep Date: **3/17/2023**	Analysis Date: **3/20/2023**	SeqNo: **3451035** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.9	80	120			
Toluene	0.90	0.050	1.000	0	90.5	80	120			
Ethylbenzene	0.90	0.050	1.000	0	89.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.7	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		96.9	70	130			

Sample ID: **mb-73777**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **73777**	RunNo: **95394**
Prep Date: **3/17/2023**	Analysis Date: **3/20/2023**	SeqNo: **3451036** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BDS Enterprises | Work Order Number: 2303844 | RcptNo: 1

Received By: Desiree Dominguez 3/16/2023 8:00:00 AM DD

Completed By: Sean Livingston 3/16/2023 9:15:20 AM

Reviewed By: DAD 3/16/23

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JA 3-16-23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Not Present	Morty		

Chain-of-Custody Record

Client: BDS Environmental

Mailing Address: 1705 Greene St

Carlsbad N.M 88220

Phone: 575 247-1106

email or Fax#: rebecca@bdsoilfield.com,jamesc@bd

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☒ Rush 5-Day

Project Name:

Plug 17

Project #:

Project Manager:

Rebbeca Pons

J. Carnes

On Ice: ☒ Yes ☐ No

# of Coolers: 1 Marty

Cooler Temp(including CF): 1.7 -0.1=1.6°c

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2303Y44	Analysis Request: Chlorides	TPH	BTEX
3/14/2023	10:00	Soil	S-1 0-1'	Glass Jar/1	Ice/Cool	001	X	X	X
3/14/2023	10:03	Soil	S-1 2'	Glass Jar/1	Ice/Cool	002	X	X	X
3/14/2023	10:06	Soil	S-1 3'	Glass Jar/1	Ice/Cool	003	X	X	X
3/14/2023	10:09	Soil	S-1 4'	Glass Jar/1	Ice/Cool	004	X	X	X
3/14/2023	10:15	Soil	S-2 0-1'	Glass Jar/1	Ice/Cool	005	X	X	X
3/14/2023	10:18	Soil	S-2 2' R	Glass Jar/1	Ice/Cool	006	X	X	X
3/14/2023	10:25	Soil	S-3 0-1'	Glass Jar/1	Ice/Cool	007	X	X	X
3/14/2023	10:28	Soil	S-3 2'	Glass Jar/1	Ice/Cool	008	X	X	X
3/14/2023	10:31	Soil	S-3 3' R	Glass Jar/1	Ice/Cool	009	X	X	X
3/14/2023	10:40	Soil	S-4 0-1'	Glass Jar/1	Ice/Cool	010	X	X	X
3/14/2023	10:43	Soil	S-4 2'	Glass Jar/1	Ice/Cool	011	X	X	X
3/14/2023	10:46	Soil	S-4 3' R	Glass Jar/1	Ice/Cool	012	X	X	X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3/15/23	800				3/15/23	800
Date: 3/15/23	Time: 1900	Relinquished by:	Received by:	Via: Courier	Date 3/16/23	Time 8:00

Remarks: Email Results to: rebecca@bdsoilfield.com, jamesc@bdsoilfield.com Page 1/2

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: BDS Environmental

Mailing Address: 1705 Greene St

Carlsbad N.M 88220

Phone: 575 247-1106

email or Fax#: rebecca@bdsoilfield.com,jamesc@bd

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush 5-Day

Project Name:

Plug 17

Project #:

Project Manager:

Rebbeca Pons

J. Carnes

On Ice: ☒ Yes ☐ No

# of Coolers: 1 Marty

Cooler Temp(including CF): 1.7 -0.1 = 1.6°c

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	Analysis Request: Chlorides	TPH	BTEX
3/14/2023	10:50	Soil	BG-1 0'	Glass Jar/1	Ice/Cool	013	X	X	X
3/14/2023	10:55	Soil	BG-2 0'	Glass Jar/1	Ice/Cool	014	X	X	X
3/14/2023	11:00	Soil	BG-3 0'	Glass Jar/1	Ice/Cool	015	X	X	X
3/14/2023	11:05	Soil	BG-4 0'	Glass Jar/1	Ice/Cool	016	X	X	X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3/15/23	800D 1400				3/15/23	800
Date: 3/15/23	Time: 1900	Relinquished by:	Received by:	Via: Courier	Date 3/14/23	Time 8:00

Remarks: Email Results to: rebecca@bdsoilfield.com, jamesc@bdsoilfield.com Page 2/2

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 15, 2023

Rebecca Pons
BDS Enterprises
1705 E Greene St
Carlsbad, NM 88220
TEL: (575) 441-0980
FAX:

RE: Plug 17 OrderNo.: 2305199

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/4/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2305199**
Date Reported: **5/15/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Project: Plug 17
Lab ID: 2305199-001 **Matrix:** SOIL

Client Sample ID: BH-2 4'
Collection Date: 5/2/2023 9:30:00 AM
Received Date: 5/4/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	1000	60		mg/Kg	20	5/6/2023 1:23:38 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2305199**
Date Reported: **5/15/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: BH-2 6'R
Project: Plug 17
Collection Date: 5/2/2023 9:50:00 AM
Lab ID: 2305199-002 **Matrix:** SOIL **Received Date:** 5/4/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	2600	150		mg/Kg	50	5/8/2023 11:48:37 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2305199**
Date Reported: **5/15/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: BH-4 5'R
Project: Plug 17
Collection Date: 5/2/2023 10:55:00 AM
Lab ID: 2305199-003 **Matrix:** SOIL **Received Date:** 5/4/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	160	60		mg/Kg	20	5/6/2023 1:48:19 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2305199**

15-May-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **MB-74793**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **74793**	RunNo: **96564**
Prep Date: **5/5/2023**	Analysis Date: **5/5/2023**	SeqNo: **3501011** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-74793**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **74793**	RunNo: **96564**
Prep Date: **5/5/2023**	Analysis Date: **5/5/2023**	SeqNo: **3501012** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BDS Enterprises | Work Order Number: 2305199 | RcptNo: 1

Received By: Tracy Casarrubias 5/4/2023 7:20:00 AM

Completed By: Tracy Casarrubias 5/4/2023 8:01:47 AM

Reviewed By: JN 5/4/23

Chain of Custody

1. Is Chain of Custody complete?	Yes ☐	No ☑	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: MA 5/4/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Mailing address and phone number are missing on COC- TMC 5/4/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good	Yes	Yogi		

Chain-of-Custody Record

Client: BDS Enterprises

Mailing Address:

Phone #:

email or Fax#: rebecca@bdsoilfield.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 5-Day

Project Name: Plug 17

Project #:

Project Manager: Rebecca Pons

Sampler: J. Carnes, A. Parra

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 5.0 +0.1 = 5.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2305199	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl, F, Br, NO_3, NO_2, PO_4, SO_4)	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5-2-23	9:30	Soil	BH-2 4'	Jar/1	Ice/Cool	001							X			
5-2-23	9:50	Soil	BH-2 6' R	Jar/1	Ice/Cool	002							X			
5-2-23	10:55	Soil	BH-4 5' R	Jar/1	Ice/Cool	003							X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/3/23	1030				5/3/23	1030
5/3/23	1900			Courier	5/4/23	7:20

Remarks:
Email Results
rebecca@bdsoilfield.com
jamesc@bdsoilfield.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 15, 2023

Rebecca Pons
BDS Enterprises
1705 E Greene St
Carlsbad, NM 88220
TEL: (575) 441-0980
FAX:

RE: Plug 17 OrderNo.: 2308387

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/8/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2308387**
Date Reported: **8/15/2023**

CLIENT: BDS Enterprises
Client Sample ID: S 528A
Project: Plug 17
Collection Date: 8/7/2023 10:30:00 AM
Lab ID: 2308387-001 **Matrix:** SOIL **Received Date:** 8/8/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/10/2023 7:48:24 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/10/2023 7:48:24 AM
Surr: DNOP	85.1	69-147		%Rec	1	8/10/2023 7:48:24 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/10/2023 6:16:35 AM
Surr: BFB	95.2	15-244		%Rec	1	8/10/2023 6:16:35 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	8/10/2023 6:16:35 AM
Toluene	ND	0.047		mg/Kg	1	8/10/2023 6:16:35 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/10/2023 6:16:35 AM
Xylenes, Total	ND	0.094		mg/Kg	1	8/10/2023 6:16:35 AM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	8/10/2023 6:16:35 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	8/10/2023 8:31:29 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2308387**
Date Reported: **8/15/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S 522A
Project: Plug 17
Collection Date: 8/7/2023 10:35:00 AM
Lab ID: 2308387-002 **Matrix:** SOIL **Received Date:** 8/8/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	8/10/2023 2:43:19 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/10/2023 2:43:19 PM
Surr: DNOP	116	69-147		%Rec	1	8/10/2023 2:43:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/10/2023 6:40:07 AM
Surr: BFB	93.8	15-244		%Rec	1	8/10/2023 6:40:07 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	8/10/2023 6:40:07 AM
Toluene	ND	0.048		mg/Kg	1	8/10/2023 6:40:07 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/10/2023 6:40:07 AM
Xylenes, Total	ND	0.096		mg/Kg	1	8/10/2023 6:40:07 AM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	8/10/2023 6:40:07 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	60		mg/Kg	20	8/11/2023 1:41:43 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2308387**
Date Reported: **8/15/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BDS Enterprises
Client Sample ID: S 520A
Project: Plug 17
Collection Date: 8/7/2023 10:40:00 AM
Lab ID: 2308387-003 **Matrix:** SOIL **Received Date:** 8/8/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/10/2023 2:54:07 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/10/2023 2:54:07 PM
Surr: DNOP	109	69-147		%Rec	1	8/10/2023 2:54:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/10/2023 7:03:41 AM
Surr: BFB	90.1	15-244		%Rec	1	8/10/2023 7:03:41 AM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Benzene	ND	0.024		mg/Kg	1	8/10/2023 7:03:41 AM
Toluene	ND	0.048		mg/Kg	1	8/10/2023 7:03:41 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/10/2023 7:03:41 AM
Xylenes, Total	ND	0.095		mg/Kg	1	8/10/2023 7:03:41 AM
Surr: 4-Bromofluorobenzene	102	39.1-146		%Rec	1	8/10/2023 7:03:41 AM
EPA METHOD 300.0: ANIONS						Analyst: **SNS**
Chloride	ND	59		mg/Kg	20	8/11/2023 1:54:08 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308387**

15-Aug-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **MB-76802**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **76802**	RunNo: **98905**
Prep Date: **8/10/2023**	Analysis Date: **8/10/2023**	SeqNo: **3603583** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-76802**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **76802**	RunNo: **98905**
Prep Date: **8/10/2023**	Analysis Date: **8/10/2023**	SeqNo: **3603584** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Sample ID: **MB-76804**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **76804**	RunNo: **98905**
Prep Date: **8/10/2023**	Analysis Date: **8/10/2023**	SeqNo: **3603585** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-76804**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **76804**	RunNo: **98905**
Prep Date: **8/10/2023**	Analysis Date: **8/10/2023**	SeqNo: **3603586** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308387**

15-Aug-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **2308387-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S 528A**	Batch ID: **76761**	RunNo: **98859**
Prep Date: **8/9/2023**	Analysis Date: **8/10/2023**	SeqNo: **3601545** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.9	49.36	0	105	54.2	135			
Surr: DNOP	4.9		4.936		98.3	69	147			

Sample ID: **2308387-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S 528A**	Batch ID: **76761**	RunNo: **98859**
Prep Date: **8/9/2023**	Analysis Date: **8/10/2023**	SeqNo: **3601546** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.8	48.83	0	104	54.2	135	2.38	29.2	
Surr: DNOP	4.5		4.883		93.0	69	147	0	0	

Sample ID: **LCS-76761**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **76761**	RunNo: **98859**
Prep Date: **8/9/2023**	Analysis Date: **8/10/2023**	SeqNo: **3601553** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.5	61.9	130			
Surr: DNOP	4.5		5.000		90.4	69	147			

Sample ID: **MB-76761**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **76761**	RunNo: **98859**
Prep Date: **8/9/2023**	Analysis Date: **8/10/2023**	SeqNo: **3601556** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	69	147			

Sample ID: **LCS-76771**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **76771**	RunNo: **98859**
Prep Date: **8/9/2023**	Analysis Date: **8/10/2023**	SeqNo: **3602161** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	107	61.9	130			
Surr: DNOP	5.0		5.000		101	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308387**

15-Aug-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **MB-76771**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **76771**	RunNo: **98859**
Prep Date: **8/9/2023**	Analysis Date: **8/10/2023**	SeqNo: **3602162** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		122	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308387**

15-Aug-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **lcs-76742**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **76742**	RunNo: **98834**
Prep Date: **8/8/2023**	Analysis Date: **8/9/2023**	SeqNo: **3602041** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.4	70	130			
Surr: BFB	2000		1000		196	15	244			

Sample ID: **mb-76742**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **76742**	RunNo: **98834**
Prep Date: **8/8/2023**	Analysis Date: **8/9/2023**	SeqNo: **3602042** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.5	15	244			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308387**

15-Aug-23

Client: BDS Enterprises

Project: Plug 17

Sample ID: **LCS-76742**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **76742**	RunNo: **98834**
Prep Date: **8/8/2023**	Analysis Date: **8/9/2023**	SeqNo: **3602074** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	70	130			
Toluene	1.0	0.050	1.000	0	104	70	130			
Ethylbenzene	1.0	0.050	1.000	0	104	70	130			
Xylenes, Total	3.1	0.10	3.000	0	105	70	130			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	39.1	146			

Sample ID: **mb-76742**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **76742**	RunNo: **98834**
Prep Date: **8/8/2023**	Analysis Date: **8/9/2023**	SeqNo: **3602075** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	39.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BDS Enterprises Work Order Number: 2308387 RcptNo: 1

Received By: Steve McQuiston 8/7/2023 4:25:00 PM

Completed By: Tracy Casarrubias 8/8/2023 8:12:12 AM

Reviewed By: JN 8/8/23

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	# of preserved bottles checked for pH: / (<2 or >12 unless noted)
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: SCM 08/08/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes	Morty		

Chain-of-Custody Record

Client: BDS

Mailing Address: 1705 Frew ST
Carlsbad.

Phone #: 575.247-1106

email or Fax#: Rebecca@BDSenfied.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☑ Rush 5 Day

Project Name: Plug. 17

Project #:

Project Manager: R. Pons

Sampler:

On Ice: ☑ Yes ☐ No

# of Coolers: 1 NORTH

Cooler Temp(including CF): 3.0-0=3.0 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2308307	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/7	10:30	SOIL	SS28A	8oz Jar	Ice	001	✓	✓					✓			
	10:35		SS22A			002										
	10:40		SS20A			003										

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/7/23	1150				8/7/23	1150
8/7/23	1900		SCM	COURIER	8/8/23	0720

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

SM 8/8/23

Appendix VI

Correspondence

jamesc@bdsoilfield.com

From: Taylor, Shelly J <sjtaylor@blm.gov>
Sent: Tuesday, May 23, 2023 12:56 PM
To: jamesc@bdsoilfield.com
Cc: 'BDS'
Subject: Re: [EXTERNAL] Plug 17

You are cleared to proceed with remedial activties.

Sincerely,

Shelly J Taylor

Environmental Protection Specialist
Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.499.6831
sjtaylor@blm.gov

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

PLEASE NOTE: I have a new email address: **sjtaylor@blm.gov**

From: jamesc@bdsoilfield.com <jamesc@bdsoilfield.com>
Sent: Friday, May 19, 2023 7:58 AM
To: Taylor, Shelly J <sjtaylor@blm.gov>
Cc: 'BDS' <rebecca@bdsoilfield.com>
Subject: [EXTERNAL] Plug 17

Good Morning Shelly,

I have attached the work plan for the Plug 17. As per our conversation we are asking to take the excavation to 4 feet, in areas needing to go to this depth, and confirmation sample the bottom to show the amount of chlorides left in the ground and the sidewalls to show horizontal delineation.

Thank you,

jamesc@bdsoilfield.com

From: Taylor, Shelly J <sjtaylor@blm.gov>
Sent: Tuesday, May 23, 2023 12:57 PM
To: jamesc@bdsoilfield.com
Cc: 'BDS'
Subject: Re: [EXTERNAL] Plug 17

Yes… Since the initial sampling was ND you are cleared to proceed with chloride samples only.

Sincerely,

Shelly J Taylor
Environmental Protection Specialist
Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.499.6831
sjtaylor@blm.gov

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

PLEASE NOTE: I have a new email address: **sjtaylor@blm.gov**

From: jamesc@bdsoilfield.com <jamesc@bdsoilfield.com>
Sent: Friday, May 19, 2023 2:29 PM
To: Taylor, Shelly J <sjtaylor@blm.gov>
Cc: 'BDS' <rebecca@bdsoilfield.com>
Subject: [EXTERNAL] Plug 17

Good Afternoon Shelly,

I was curious if on the Plug 17 we could just run chlorides on the labs since that was the only analyte of concern on the site. Please let us know if we can do that.

Thank you,

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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 390489

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390489
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2304148392**
Incident Name	**NAPP2304148392 ROW 2 PIPELINE @ 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	ROW 2 PIPELINE
Date Release Discovered	01/28/2023
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: Human Error | Valve | Produced Water | Released: 144 BBL | Recovered: 60 BBL | Lost: 84 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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390489
	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)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
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: 10/07/2024

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390489
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	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 1 and 5 (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	Between 1 and 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 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	368
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
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	03/14/2023
On what date will (or did) the final sampling or liner inspection occur	09/13/2024
On what date will (or was) the remediation complete(d)	09/13/2024
What is the estimated surface area (in square feet) that will be reclaimed	4048
What is the estimated volume (in cubic yards) that will be reclaimed	1370
What is the estimated surface area (in square feet) that will be remediated	4048
What is the estimated volume (in cubic yards) that will be remediated	1370
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390489
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
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.	
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	OWL LANDFILL JAL [fJEG1635837366]
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.*
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 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: 10/07/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390489
	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

District I
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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390489
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**382655**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**09/13/2024**
What was the (estimated) number of samples that were to be gathered	**1**
What was the sampling surface area in square feet	**200**

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	4048
What was the total volume (cubic yards) remediated	1370
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	4048
What was the total volume (in cubic yards) reclaimed	1370
Summarize any additional remediation activities not included by answers (above)	"Additional remediation activities were conducted at the Site to address the denied Closure Request submitted for the January 28,2023, release of produced water. Laboratory analytical results for all confirmation soil samples indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the most stringent Table 1 Closure Criteria in the top four feet. Based on the soil sample analytical results, no further remediation was required. XTO backfilled the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions. The disturbed area on the ROW will be re-seeded with an approved BLM seed mixture within 90 days or the next recommended BLM planting season. Excavation of impacted soil from the top four feet has mitigated impacts at this Site. Depth to groundwater has been determined to be greater than 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 nAPP2304148392. "
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: 10/07/2024

District I
1625 N. French Dr., Hobbs, NM 88240
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District IV
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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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390489
	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 390489

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390489
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. The OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	11/8/2024