



March 27, 2025

New Mexico Oil Conservation Division

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

**Re: Closure Request
PLU 342
Incident Number nAPP2407438506
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Closure Request* to document assessment, excavation, and soil sampling activities completed to date at the PLU 342 (Site). The purpose of the assessment and excavation activities was to assess the presence or absence of impacts to soil following a release of produced water onto a lease road and adjacent right-of-way (ROW). Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this *Closure Request* describing assessment, excavation, and soil sampling activities that have occurred and requesting no further action for Incident Number nAPP2407438506.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit H, Section 22, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.204208°, -103.862151°) and is associated with oil and gas exploration and production operations on Federal land managed by the Bureau of Land Management (BLM).

On February 27, 2024, failure of a 4-inch water transfer polyline resulted in the release of 24 barrels (bbls) of produced water onto the lease road and adjacent ROW. A vacuum truck was dispatched to the Site and recovered 1 bbl of the released fluids. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via Notification of Release (NOR) and submitted an Initial C-141 Application (C-141) on March 14, 2024. The release was assigned Incident Number nAPP2407438506.

In August 2024, XTO submitted an extension request for a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for several locations and Incident numbers. XTO noted that the releases all occurred between February and March of this year and attendant documentation was overdue. The releases occurred during a high turnover period of personnel, transitioning staff, and a large company-wide data migration that collectively disturbed incident tracking efforts for remediation. In our efforts to correct the issue, XTO submitted the extension request and assigned the release to be remediated. NMOCD approved the extension request for one of the Incident Numbers, but all others were denied for the following reason:

An extension request needs to be requested before the Remediation Closure Report Due Date Deadline. All of these incidents are at least 60 days out of compliance. The extension requests are denied. Please include this e-mail correspondence in the remediation and/or closure reports.

XTO Energy, Inc.
Closure Request
PLU 342

All NMOCD correspondence is included in Appendix A. Remediation activities began immediately following the notification to the NMOCD.

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. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on a soil boring drilled for determination of regional groundwater depth. On January 16, 2025, a borehole (C-04911) was advanced to a depth of 105 feet below ground surface (bgs) utilizing hollow stem auger drilling method. The borehole was located approximately 0.38 miles northwest of the Site. A field geologist logged and described soils continuously. The borehole 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 100 feet bgs. The borehole was properly abandoned using hydrated bentonite chips. All well records used to determine depth to groundwater are attached in Appendix B.

The closest continuously flowing or significant watercourse to the Site, shown on the NMOCD Oil and Gas Map, is dry wash located approximately 305 feet west of the Site. During site assessment activities, Ensolum personnel confirmed that the watercourse is discontinuous and doesn't qualify as a significant watercourse. The next nearest significant watercourse is a drywash and is located 4,042 feet north of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area).

Based on the results of the Site Characterization and the depth to groundwater investigation mentioned above, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

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

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

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On August 20, 2024, Ensolum personnel conducted a Site visit to evaluate the release extent based on information provided in the C-141 and visual observations. Ensolum personnel collected eight delineation soil samples (SS01 through SS08) around the release extent from a depth of 0.5 feet bgs to assess the lateral extent of impacted soil. The release extent and soil sample locations were mapped

XTO Energy, Inc.
Closure Request
PLU 342

utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix C.

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 constituents of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method SM4500.

Based on visual observations and field screening results, additional delineation within the release extent was warranted. As such, Ensolum personnel returned to the Site on October 24, 2024 and advanced boreholes BH01 through BH05 via hand auger within the release extent. The boreholes were advanced to a maximum depth of 1 foot bgs where hand auger refusal occurred due to encountering a competent formation. Discrete soil samples were collected from each pothole at depths ranging from 0.5 feet to 1-foot bgs. Soil from the boreholes were field screened for VOCs and chloride. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix C. In addition to the borings, Ensolum personnel collected delineation soil samples (SS09 through SS11) from a depth of 0.5 feet bgs within the release extent. The soil samples were handled and analyzed as described above and submitted to Cardinal in Hobbs, New Mexico. The soil sample locations are depicted on Figure 2.

Following approved land access from the BLM, Ensolum personnel returned to the Site on November 5, 2024 to oversee further delineation via core drill. The core drill was utilized to further delineate each borehole to terminal depths ranging from 4 feet bgs to 6 feet bgs. Soil from the boreholes was field screened for VOCs and chloride, and results and observations were logged on a lithologic/soil sampling log, which are included in Appendix D. All soil samples were handled and analyzed as described above and submitted to Cardinal in Hobbs, New Mexico.

Laboratory analytical results for all delineation soil samples, with the exception of SS10, indicated all COCs were in compliance with Site Closure Criteria and reclamation requirements. Laboratory analytical results for delineation soil sample SS10 indicated TPH concentrations exceeded the reclamation requirement.

CONFIRMATION SOIL SAMPLING AND EXCAVATION ACTIVITIES

Between December 19 through December 20, 2024, confirmation soil samples were collected from within the release area. Ensolum personnel collected 5-point composite soil samples representing no more than 200 square feet from the release extent. The 5-point composite soil samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Samples CS01 through CS42 were collected from an approximate depth of 0.5 feet bgs to assess the extent of the waste-containing soil identified during delineation activities.

Laboratory analytical results for composite soil samples CS10, CS16, CS17, CS19, CS26 and CS27 indicated the concentrations of TPH exceeded the reclamation requirement. Laboratory analytical results for all other composite soil samples indicated all COCs were in compliance with Site Closure Criteria and reclamation requirement.

XTO Energy, Inc.
Closure Request
PLU 342

Between January 24 and January 29, 2025, Ensolum personnel returned to Site to oversee excavation activities to remove the identified waste-containing soil. Excavation activities were completed utilizing a hydrovacuum truck, trackhoe, and transport vehicle. The excavation occurred on the lease road and adjacent ROW near production pipelines. Following removal of waste-containing soil, Ensolum personnel collected 5-point composite soil samples representing no more than 200 square feet from the sidewalls and floor of the excavations. Confirmation soil sample FS01 was collected from the floor of the excavation at a depth of 7 feet bgs. Confirmation soil samples FS02 through FS04 were collected from the floor of the excavations at a depth of 1.5 bgs. Confirmation sidewall samples SW01 and SW05 were collected from the sidewalls of the deepest excavation extent at depths ranging from ground surface to 4 feet bgs and 4 feet bgs to 7 feet bgs, respectively. Confirmation sidewall soil samples SW02 through SW04 were collected from the sidewalls of the excavations at depths ranging from ground surface to 4 feet bgs. The confirmation soil samples were collected, handled, and analyzed following the same procedures as described above.

In addition, a surface scrape of less than 0.5 feet bgs was completed in the area around confirmation samples CS16 and CS19. Two 5-point composite soil sample were collected from a depth of 0.5 feet bgs. The soil samples were collected, field screened, and analyzed following the same procedures described above.

The final excavation extents, in total measured approximately 823 square feet. A total of approximately 80 cubic yards of waste-containing soil was removed during the excavation activities. The waste-containing soil was transported and properly disposed of at R360 Halfway Disposals in Hobbs, New Mexico. Copies of the disposal manifests are included in Appendix E. XTO has backfilled the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all final confirmation soil samples, collected from 0.5 feet bgs, indicated all COCs were in compliance with Site Closure Criteria. Laboratory analytical results for all excavation soil samples, FS01 through FS04 and SW01 through SW05, indicated all COC concentrations were compliant with the Closure Criteria and reclamation requirement. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix F.

CLOSURE REQUEST

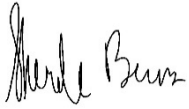
Site assessment, delineation, and excavation activities were conducted at the Site to address the February 27, 2024, release of produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, and confirmation soil samples, collected from the surface of the release extent, indicated that all COC concentrations were compliant with the Closure Criteria and reclamation requirement. Based on the soil sample analytical results, no further remediation is required. The disturbed ROW will be re-seeded with an approved BLM seed mixture.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number nAPP2407438506.

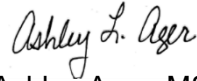
If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

XTO Energy, Inc.
Closure Request
PLU 342

Sincerely,
Ensolum, LLC



Sherele Brooks
Staff Scientist



Ashley Ager, MS, PG
Principal, Geologist

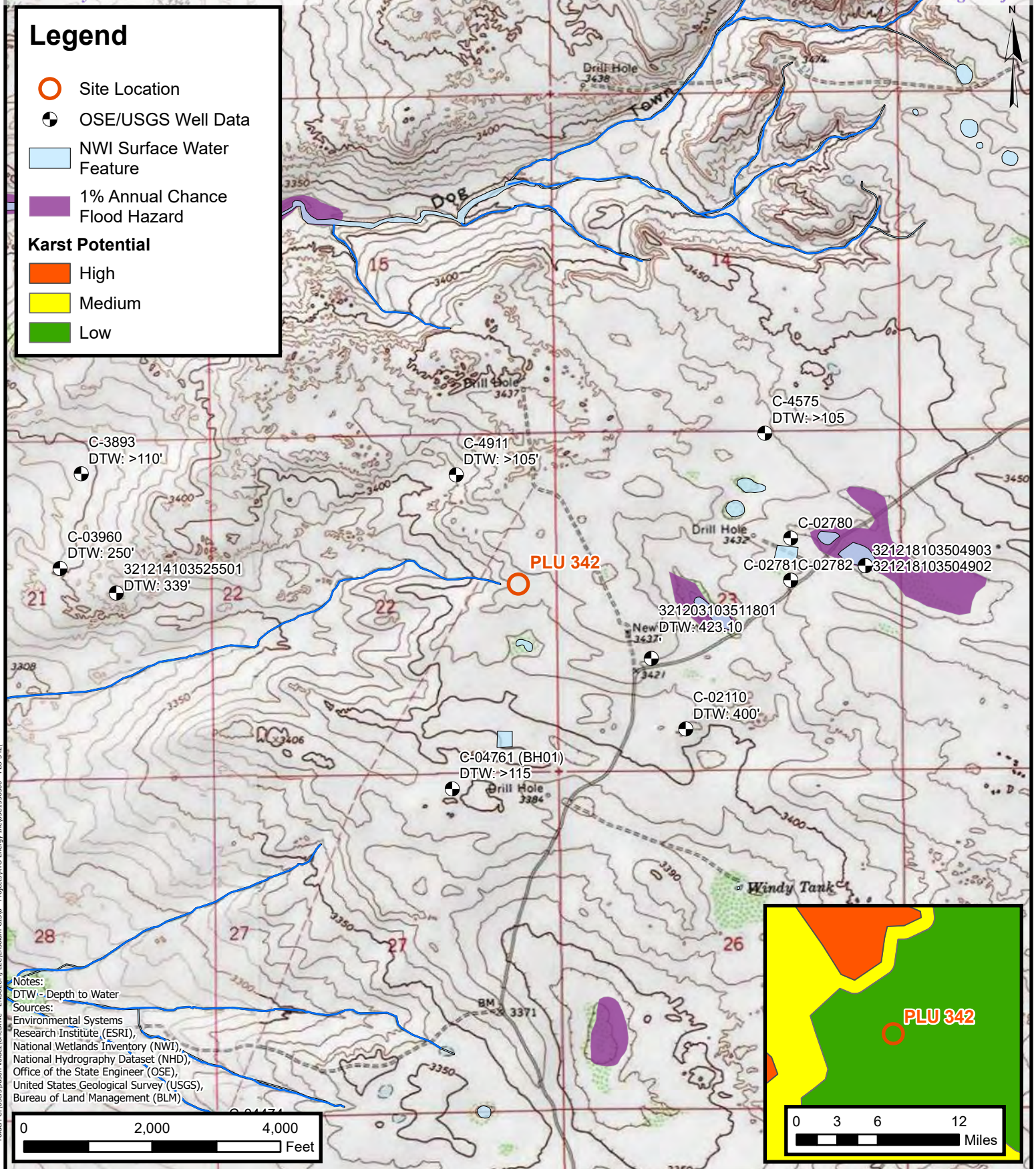
cc: Colton Brown, XTO
Kaylan Dirkx, XTO
BLM

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Confirmation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	NMOCD Correspondence
Appendix B	Referenced Well Records
Appendix C	Photographic Log
Appendix D	Lithologic / Soil Sampling Logs
Appendix E	Disposal Manifests
Appendix F	Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES



ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants

Site Receptor Map
XTO Energy Inc.
PLU 342
Incident Number: nAPP2407438506
Unit H, Section 22, T 24S, R 30E
Eddy County, New Mexico

FIGURE
1



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

Sources: Environmental Systems Research Institute (ESRI)



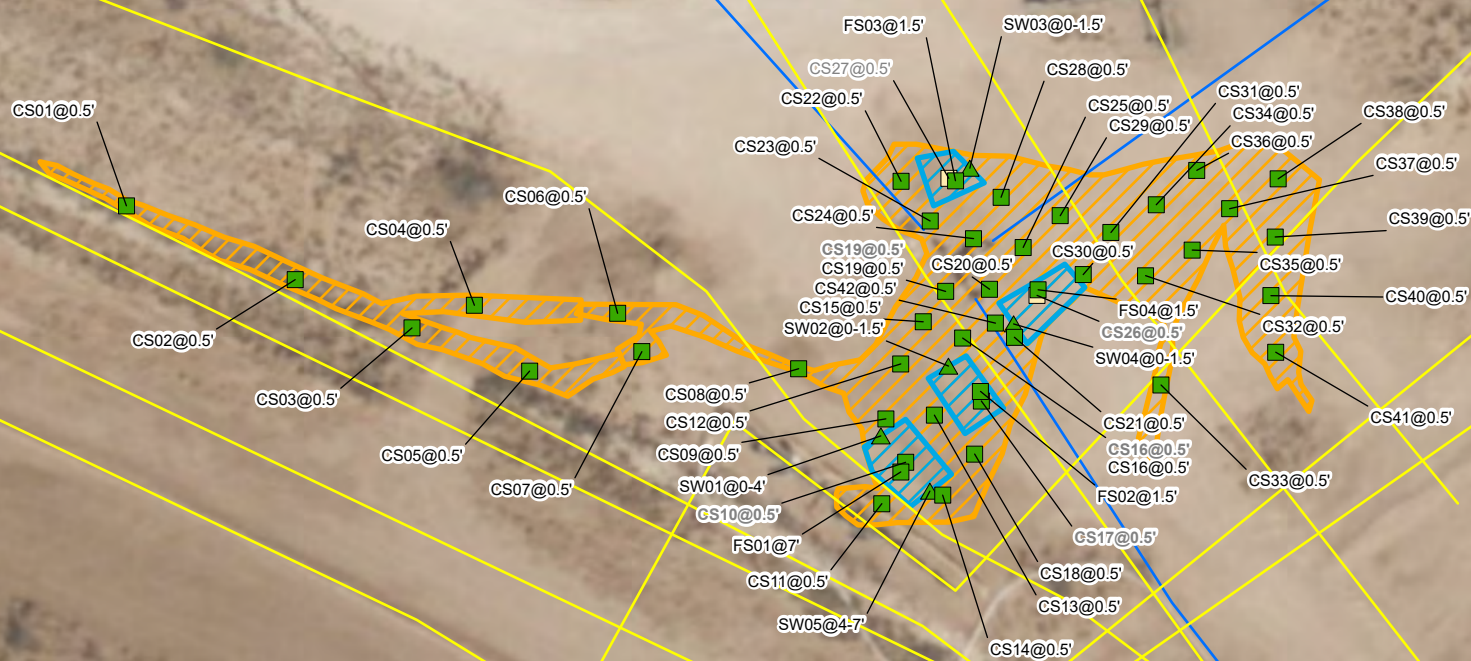
XTO Energy Inc.
PLU 342

Incident Number: nAPP2407438506
Unit H, Section 22, T 24S, R 30E
Eddy County, New Mexico

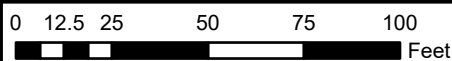
FIGURE 2

Legend

- Confirmation Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Sample in Compliance with Closure Criteria
- Confirmation Sample - Removed
- Oil and Gas Utility Line
- Water Utility Line
- ▨ Release Extent
- ▨ Excavation Extent



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



Sources: Environmental Systems Research Institute (ESRI)



Excavation Soil Sample Locations

XTO Energy Inc.
 PLU 342
 Incident Number: nAPP2407438506
 Unit H, Section 22, T 24S, R 30E
 Eddy County, New Mexico

FIGURE

3



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU 342
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 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
SS01	8/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS02	8/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS03	8/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS04	8/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS05	8/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS06	8/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS07	8/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
BH04	10/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
BH04A	10/24/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
BH04D	11/5/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
SS08	8/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
BH02D	11/6/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SS09	10/24/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
BH01	10/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
BH01D	11/6/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SS10	10/24/2024	0.5	<0.050	<0.300	<10.0	1,270	472	1,270	1,742	16.0
BH03B	11/6/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
BH03E	11/6/2024	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,390
BH03F	11/6/2024	6	<0.050	<0.300	<10.0	11.3	<10.0	11.3	11.3	928
SS11	10/24/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH05D	11/5/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
Confirmation Soil Samples										
CS01	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS02	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS03	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS04	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
CS05	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS06	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS07	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS08	12/19/2024	0.5	<0.050	<0.300	<10.0	72.9	19.9	72.9	92.8	32.0
CS09	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
CS10	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	768
CS11	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU 342
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 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
CS12	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
CS13	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
CS14	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS15	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
CS16	12/19/2024	0.5	<0.050	<0.300	<10.0	670	377	670	1,047	48.0
CS16	1/28/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	352
CS17	12/19/2024	0.5	<0.050	<0.300	<10.0	612	363	612	975	32.0
CS18	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
CS19	12/19/2024	0.5	<0.050	<0.300	<10.0	670	377	670	1,047	<16.0
CS19	1/28/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
CS20	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
CS21	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS22	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
CS23	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS24	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
CS25	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
CS26	12/19/2024	0.5	<0.050	<0.300	<10.0	138	74.5	138	213	64.0
CS27	12/19/2024	0.5	<0.050	<0.300	<10.0	79.4	34.9	79.4	114	48.0
CS28	12/19/2024	0.5	<0.050	<0.300	<10.0	35.0	18.3	35.0	53.3	48.0
CS29	12/19/2024	0.5	<0.050	<0.300	<10.0	14.8	<10.0	14.8	14.8	64.0
CS30	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS31	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS32	12/19/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS33	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
CS34	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
CS35	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
CS36	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
CS37	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS38	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
CS39	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
CS40	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
CS41	12/20/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS42	1/29/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU 342
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 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Excavation Soil Samples										
FS01	1/27/2025	7	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	432
FS02	1/28/2025	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	304
FS03	1/29/2025	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS04	1/29/2025	1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
SW01	1/29/2025	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	464
SW02	1/29/2025	0-1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	400
SW03	1/29/2025	0-1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SW04	1/29/2025	0-1.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SW05	1/29/2025	4-7	<0.050	<0.300	<10.0	10.3	<10.0	10.3	10.3	640

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



Appendix A

NMOCD Correspondence



Outlook

FW: XTO Extension Request - Multiple Past-Due Incidents Discovered

From Romero, Alan <alan.romero1@exxonmobil.com>**Date** Fri 8/16/2024 2:14 PM**To** Tacoma Morrissey <tmorrissey@ensolum.com>; Ben Belill <bbelill@ensolum.com>

1 attachment (37 KB)

XTO Multiple Incidents Extension Request 8-16-24.pdf;

[**EXTERNAL EMAIL**]

From: Romero, Alan**Sent:** Friday, August 16, 2024 11:59 AM**To:** NMOCD (ocd.enviro@emnrd.nm.gov) <ocd.enviro@emnrd.nm.gov>**Cc:** amanda.garcia@exxonmobil.com; amy.ruth@exxonmobil.com; Brown, Colton S <colton.s.brown@exxonmobil.com>; Dirkx, Kaylan <kaylan.dirkx@exxonmobil.com>; Smith, Kailee /C <kailee.smith@exxonmobil.com>**Subject:** XTO Extension Request - Multiple Past-Due Incidents Discovered

Good Afternoon,

XTO is requesting an extension for a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the attached locations/incident numbers listed in this message. We understand that the releases all occurred between February and March of this year and attendant documentation is overdue. Kindly be aware that these occurred during a high turnover period of personnel in our department, transitioning staff, and a large company-wide data migration that collectively disturbed our incident tracking efforts for remediation. In our efforts to correct the issue, XTO is proactively assigning each of these incidents to be successfully addressed by contractors for closure in accordance with 19.15.29.12 NMAC.

Please let me know if there is any more information or clarity I can provide. Thank you for your time and consideration.

Respectfully,

Alan Romero

Environmental/Regulatory Advisor

Permian Business Unit – New Mexico Delaware Basin

ExxonMobil Upstream Oil & Gas Company Unconventional

3104 East Greene Street

Carlsbad, New Mexico 88220

Direct: (575) 988-3383

Poker Lake Unit 22 DTD

NAPP2405961992

Release Date: 2/14/24

Closure Due Date: 5/14/24

PLU 342

NAPP2407438506

Release Date: 2/27/24

Closure Due Date: 5/27/24

PLU South Pond

NAPP2405971517

Release Date: 2/14/24

Closure Due Date: 5/14/24

PLU 25 CTB

NAPP2408553359

Release Date: 3/11/24

Closure Due Date: 6/10/24

PLU 28 Big Sinks West Battery

NAPP2406159589

Release Date: 2/16/24

Closure Due Date: 5/16/24

Big Eddy Hackberry 34 Battery

NAPP2408932392

Release Date: 3/15/24

Closure Due Date: 6/13/24

Poker Lake Unit 26 BD W CVB

NAPP2406161820

Release Date: 2/16/24

Closure Due Date: 5/16/24

Poker Lake Unit 28-21 Big Sinks

NAPP2409248851

Release Date: 3/19/24

Closure Due Date: 6/17/24

Nash Unit 53 SWD

NAPP2406163532

Release Date: 2/20/24

Closure Due Date: 5/20/24

Perla Verde 31 State 001H

NAPP2412749555

Release Date: 5/2/24

Closure Due Date: 7/31/24



APPENDIX B

Referenced Well Records



2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

February 10, 2025

DII-NMOSE
1900 W 2nd Street
Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4911 Pod-1

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, C-4911 Pod-1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above

FILED
20 FEB 20 2025



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4911			
	WELL OWNER NAME(S) XTO Energy, Inc.				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 3104 E. Greene St.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 12	SECONDS 32.23 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	51	54.46 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE NW NE Sec. 22, T 24S R30E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 01/16/2025	DRILLING ENDED 01/16/2025	DEPTH OF COMPLETED WELL (FT) Temporary Well Material		BORE HOLE DEPTH (FT) ±105	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 1/16/25, 1/24/25		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	104	±6.25	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	104	104	Sand, fine-grained, poorly-graded, unconsolidated, Reddish Brown	Y <input checked="" type="checkbox"/> N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. PLU 22 DTD CVB					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING: <div style="display: flex; justify-content: space-between;"> <div>  Jackie D. Atkins Jack Atkins (Feb 10, 2025 10:06 MST) </div> <div>02/10/2025</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div> <div>DATE</div> </div>					

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

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



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4911 POD-1

Well owner: XTO Energy, Inc.

Phone No.: _____

Mailing address: 3104 E. Greene St.

City: Carlsbad State: New Mexico Zip code: 88220

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/25
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Lucas Middleton
- 4) Date well plugging began: 01/24/2024 Date well plugging concluded: 01/24/2024
- 5) GPS Well Location: Latitude: 32 deg, 12 min, 32.23 sec
Longitude: 103 deg, 51 min, 54.46 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 104 ft below ground level (bgl),
by the following manner: water level probe
- 7) Static water level measured at initiation of plugging: n/a ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 11/5/2025
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

OSE DTM RUSSELL M.
10 FEB '25 PM 3:43

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
0-10'	Hydrated Bentonite	Approx. 15 gallons	15 gallons	Boring	
10'-104'	Drill Cuttings	Approx. 150 gallons	150 gallons	Boring	

MULTIPLY	BY	AND OBTAIN
cubic feet x 7.4805	=	gallons
cubic yards x 201.97	=	gallons

III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.


Jackie D. Atkins (Feb 10, 2025 10:06 MST)

Signature of Well Driller

02/10/2025

Date

C-4911-WR-20 Well Record and Log-packet-for sign-PLU 22 DTD CVB

Final Audit Report

2025-02-10

Created:	2025-02-10
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAV7CZPFqKvAvffT7-gD4dnblVV-wqNZb

"C-4911-WR-20 Well Record and Log-packet-forsign-PLU 22 DT D CVB" History



Document created by Lucas Middleton (lucas@atkinseng.com)

2025-02-10 - 4:55:10 PM GMT



Document emailed to Jack Atkins (jack@atkinseng.com) for signature

2025-02-10 - 4:57:47 PM GMT



Email viewed by Jack Atkins (jack@atkinseng.com)

2025-02-10 - 5:01:16 PM GMT



Document e-signed by Jack Atkins (jack@atkinseng.com)

Signature Date: 2025-02-10 - 5:06:00 PM GMT - Time Source: server



Agreement completed.

2025-02-10 - 5:06:00 PM GMT

USE DII FOR ALL
10 FEB '25 2:49



Adobe Acrobat Sign



APPENDIX C

Photographic Log

**Photographic Log**

XTO Energy, Inc.

PLU 342

nAPP2407438506



Photograph: 1 Date: 8/20/2024
 Description: Site assessment activities
 View: Southwest



Photograph: 2 Date: 10/24/2024
 Description: Delineation activities
 View: Northwest



Photograph: 3 Date: 11/06/2024
 Description: Core drill delineation activities
 View: Northwest



Photograph: 4 Date: 12/20/2024
 Description: Confirmation sampling activities
 View: West

**Photographic Log**

XTO Energy, Inc.

PLU 342

nAPP2407438506



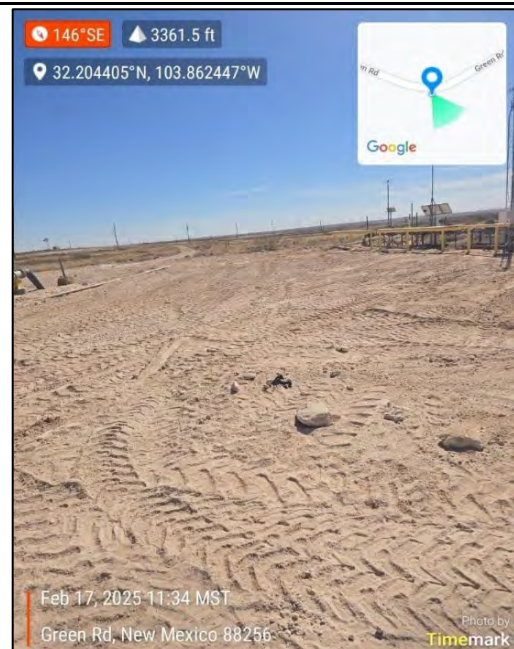
Photograph: 5 Date: 1/24/2025
Description: Excavation activities
View: South



Photograph: 6 Date: 1/30/2025
Description: Excavation activities
View: West



Photograph: 7 Date: 1/30/2025
Description: Excavation activities
View: South





Photograph: 8 Date: 2/17/2025
Description: Backfill activities
View: Southeast





APPENDIX D


Lithologic Soil Sampling Logs

 ENSOLUM		Sample Name: BH01/SS09		Date: 10/24/24, 11/06/2024				
		Site Name: PLU 342						
		Incident Number: nAPP2407438506						
		Job Number: 03C1558506						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.2042922, -103.8627278			Logged By: CW, SB		Method: hand auger/core drill			
			Hole Diameter: 2"		Total Depth: 4'			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.0	N	SS09	0.5	0	SP	SAND, very fine brown sand and silt with gravel. No stain or odor.
D	<168	0.0	N	BH01A	1	1	CCHE	CALICHE, with solid rock, and some sand. No stain or odor.
M	<168	0.0	N		2	2	SC	CLAY, solid rock with clay sludge. No stain or odor.
M	<168	0.0	N		3	3		
M	<168	0.0	N	BH01D	4	4	GC	CLAY, well graded clay with gravel. No stain or odor.
Total depth @ 4' bgs.								

 ENSOLUM		Sample Name: BH02/SS08		Date: 10/24/24, 11/06/2024				
		Site Name: PLU 342						
		Incident Number: nAPP2407438506						
		Job Number: 03C1558506						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.2042562, -103.8625064			Logged By: CW, SB		Method: Hand auger/core drill			
			Hole Diameter: 2"		Total Depth: 4'			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<174	0.0	N	SS08	0.5	0	CCHE	CALICHE tan caliche with rock. No stain or odor.
D	<168	0.0	N			1		
D	<168	0.0	N		SP	2	CCHE	CALICHE, solid rock. No stain or odor.
M	<168	0.0	N			3	SC	Solid rock with clay sludge. No stain or odor.
M	<168	0.0	N	BH02D		4		
Total depth @ 4' bgs.								

		Sample Name: BH03/SS10		Date: 10/24/24, 11/06/2024				
		Site Name: PLU 342						
		Incident Number: nAPP2407438506						
		Job Number: 03C1558506						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.2041468, -103.8621608			Logged By: CW, SB		Method: hand auger/core drill			
			Hole Diameter: 2"		Total Depth: 4'			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	<168	0.0	N	SS10	0.5		SP	SAND, very fine brown sand with silt. Poorly graded, with caliche gravel. No stain and faint odor.
D	<168	0.0	N		1	1	SP	SAND, poorly graded sand and solid rock. No stain and no odor.
M	<168	0.0	N	BH03B	2	2	SC	CLAY, solid rock with clay. No stain and no odor.
M	<168	0.0	N		3	3	SC	CLAY, solid rock with clay sludge. No stain or odor.
M	1,019	0.0	N		4	4		
M	1,299	0.00	N	BH03E	5	5		
M	330	0.0	N	BH03F	6	6		
						Total depth @ 6' bgs.		

 ENSOLUM		Sample Name: BH04/SS07		Date: 10/24/24, 11/05/2024				
		Site Name: PLU 342						
		Incident Number: nAPP2407438506						
		Job Number: 03C1558506						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.2042749, -103.8620306			Logged By: CW, SB		Method: hand auger, core drill			
			Hole Diameter: 2"		Total Depth: 4'			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	168	0.0	N	SS07	0.5		SP	SAND, very fine brown sand and silt. Poorly graded and with caliche gravel. No stain or odor.
D	<168	0.0	N	BH04	1	1		
D	<168	0.0	N	BH04A	2	2		
M	<168	0.0	N		3	3	CCHE	CALICHE, tan caliche. No stain or odor.
M	<168	0.0	N	BH04D	4	4		
Total depth @ 4' bgs.								

		Sample Name: BH05/SS11		Date: 10/24/24, 11/05/2024				
		Site Name: PLU 342						
		Incident Number: nAPP2407438506						
		Job Number: 03C1558506						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.2043292, -103.8618775			Logged By: CW, SB		Method: hand auger, core drill			
			Hole Diameter: 2"		Total Depth: 4'			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.0	N	SS11	0.5	0	CCHE	CALICHE, caliche with well graded sand. No stain or odor.
M	<168	0.0	N		1	1		
M	<168	0.0	N		2	2		
M	<168	0.0	N		3	3		
M	<168	0.0	N	BH05D	4	4	CCHE	CALICHE, solid rock. No stain or odor.
Total depth @ 4' bgs.								



APPENDIX E

Disposal Manifests

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

Company Man Contact information



(PLEASE PRINT)

REQUIRED INFORMATION

Name

Phone No.

GENERATOR

NO. **HW-7038549**

Generator Manifest #

Generator Name

Address

City, State, Zip

Phone No.

Location of Origin

Lease/Well

Name & No.

County

API No.

Rig Name & No.

AFE/PO No.

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds		NON-INJECTABLE WATERS		OTHER EXEMPT E&P WASTE STREAMS	
Oil Based Cuttings		Washout Water (Non-Injectable)			
Water Based Muds		Completion Fluid/Flow Back (Non-Injectable)			
Water Based Cuttings		Produced Water (Non-Injectable)			
Produced Formation Solids		Gathering Line Water/Waste (Non-Injectable)			
Tank Bottoms		INTERNAL USE ONLY		TOP SOIL & CALICHE SALES	
E&P Contaminated Soil		Truck Washout (exempt waste)	YES	QUANTITY	TOP SOIL
Gas Plant Waste			NO		CALICHE

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other

*please select from Non-Exempt Waste List on back

DISPOSAL QUANTITY

B - BARRELS

L - LIQUID

Y - YARDS

E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☐ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD

Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

TRANSPORTER

Transporter's

Name

Address

Phone No.

Transporter Ticket #

Driver's Name

Print Name

Phone No.

Truck No.

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

TRUCK TIME STAMP

IN:

OUT:

DISPOSAL FACILITY

RECEIVING AREA

Name/No.

Site Name/

Permit No.

Address

Halfway Facility / NM1-006

Phone No.

575-392-6368

6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

NORM READINGS TAKEN? (Circle One)

YES

NO

If YES, was reading > 50 micro roentgens? (Circle One)

YES

NO

PASS THE PAINT FILTER TEST? (Circle One)

YES

NO

TANK BOTTOMS

1st Gauge

2nd Gauge

Received

Feet

Inches

BS&W/BBLs Received

Free Water

Total Received

BS&W (%)

I hereby certify that the above load material has been (circle one):

ACCEPTED

DENIED

If denied, why?

NAME (PRINT)

DATE

TITLE

SIGNATURE

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

Company Man Contact information



(PLEASE PRINT)

REQUIRED INFORMATION

Name R. J. ATPhone No. 2652

GENERATOR

NO. **HW-7038548**

Generator Manifest # _____

Location of Origin

Generator Name _____

Lease/Well

Address _____

Name & No. Hobbs 101, B.S. 1012

City, State, Zip _____

County _____

Phone No. _____

API No. _____

Rig Name & No. _____

AFE/PO No. _____

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT E&P WASTE STREAMS
Oil Based Cuttings	Washout Water (Non-Injectable)	
Water Based Muds	Completion Fluid/Flow Back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	TOP SOIL & CALICHE SALES
E&P Contaminated Soil	Truck Washout (exempt waste)	QUANTITY TOP SOIL CALICHE
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____

*please select from Non-Exempt Waste List on back

DISPOSAL QUANTITY 20 B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE _____

DATE _____

SIGNATURE _____

TRANSPORTER

Transporter's Name 610 ServicesDriver's Name Luis Guevara

Address _____

Print Name _____

Phone No. _____

Phone No. _____

Transporter Ticket # _____

Truck No. 743 0000 2222

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____

DRIVER'S SIGNATURE _____

DELIVERY DATE _____

DRIVER'S SIGNATURE _____

TRUCK TIME STAMP

IN: _____ OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. 20

Site Name/

Halfway Facility / NM1-006Phone No. **575-392-6368**

Permit No. _____

Address **6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220**

NORM READINGS TAKEN? (Circle One)

YES

NO

If YES, was reading > 50 micro roentgens? (Circle One)

YES

NO

PASS THE PAINT FILTER TEST? (Circle One)

YES

NO

TANK BOTTOMS

	Feet	Inches	BS&W/BBLs Received	BS&W (%)
1st Gauge				
2nd Gauge			Free Water	
Received			Total Received	

I hereby certify that the above load material has been (circle one):

ACCEPTED

DENIED

If denied, why? _____

NAME (PRINT) G. M. K.DATE 3/27/25TITLE AMSIGNATURE [Signature]

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

Company Man Contact information



(PLEASE PRINT)

REQUIRED INFORMATION

Name Ken BurtPhone No. 505-888-4489

GENERATOR

NO. **HW-7039462**

Generator Manifest # _____
Generator Name XTO
Address _____
City, State, Zip _____
Phone No. _____

Location of Origin
Lease/Well Name & No. _____
County _____
API No. _____
Rig Name & No. _____
AFE/PO No. _____

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	_____	NON-INJECTABLE WATERS	_____	OTHER EXEMPT E&P WASTE STREAMS	_____
Oil Based Cuttings	_____	Washout Water (Non-Injectable)	_____		
Water Based Muds	_____	Completion Fluid/Flow Back (Non-Injectable)	_____		
Water Based Cuttings	_____	Produced Water (Non-Injectable)	_____		
Produced Formation Solids	_____	Gathering Line Water/Waste (Non-Injectable)	_____		
Tank Bottoms	_____	INTERNAL USE ONLY	_____	TOP SOIL & CALICHE SALES	_____
E&P Contaminated Soil	_____	Truck Washout (exempt waste)	YES <input type="checkbox"/> NO <input type="checkbox"/>	QUANTITY	TOP SOIL CALICHE
Gas Plant Waste	_____				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other _____ *please select from Non-Exempt Waste List on back

DISPOSAL QUANTITY 20 B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

TRANSPORTER

Transporter's Name Hick
Address _____
Phone No. _____
Transporter Ticket # _____

Driver's Name Stephano
Print Name _____
Phone No. _____
Truck No. 731 Belly Dump

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

TRUCK TIME STAMP

IN: _____ OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. 28

Site Name/ Permit No. Halfway Facility / NM1-006 Phone No. 575-392-6368
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

NORM READINGS TAKEN? (Circle One) YES ☐ NO ☐ If YES, was reading > 50 micro roentgens? (Circle One) YES ☐ NO ☐
PASS THE PAINT FILTER TEST? (Circle One) YES ☐ NO ☐

TANK BOTTOMS

1st Gauge	Feet _____	Inches _____	BS&W/BBLs Received	BS&W (%) _____
2nd Gauge	_____	_____	Free Water	_____
Received	_____	_____	Total Received	_____

I hereby certify that the above load material has been (circle one):

ACCEPTED ☒DENIED ☐

If denied, why? _____

NAME (PRINT)

DATE

TITLE

SIGNATURE

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

Company Man Contact information



(PLEASE PRINT)

REQUIRED INFORMATION

Name

Phone No.

GENERATOR

NO. **HW-7039463**

Generator Manifest #

Generator Name

Address

City, State, Zip

Phone No.

Location of Origin

Lease/Well

Name & No.

County

API No.

Rig Name & No.

AFE/PO No.

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT E&P WASTE STREAMS
Oil Based Cuttings	Washout Water (Non-Injectable)	
Water Based Muds	Completion Fluid/Flow Back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	TOP SOIL & CALICHE SALES
E&P Contaminated Soil	Truck Washout (exempt waste)	QUANTITY TOP SOIL CALICHE
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other

*please select from Non-Exempt Waste List on back

DISPOSAL QUANTITY

B - BARRELS

L - LIQUID

Y - YARDS

E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☐ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD

Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

TRANSPORTER

Transporter's

Name

Address

Phone No.

Transporter Ticket #

Driver's Name

Print Name

Phone No.

Truck No.

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

TRUCK TIME STAMP

DISPOSAL FACILITY

RECEIVING AREA

IN: OUT:

Name/No.

Site Name/

Permit No.

Address

Halfway Facility / NM1-006

Phone No.

575-392-6368

NORM READINGS TAKEN? (Circle One)

YES

NO

If YES, was reading > 50 micro roentgens? (Circle One)

YES

NO

PASS THE PAINT FILTER TEST? (Circle One)

YES

NO

TANK BOTTOMS

	Feet	Inches	BS&W/BBLs Received	BS&W (%)
1st Gauge				
2nd Gauge				
Received				

I hereby certify that the above load material has been (circle one):

ACCEPTED

DENIED

If denied, why?

NAME (PRINT)

DATE

TITLE

SIGNATURE



APPENDIX F

Laboratory Analytical Reports & Chain of Custody Documentation



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

August 26, 2024

TRACY HILLARD
ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND, TX 79705

RE: PLU 342

Enclosed are the results of analyses for samples received by the laboratory on 08/20/24 14:48.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene
Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	08/20/2024	Sampling Date:	08/20/2024
Reported:	08/26/2024	Sampling Type:	Soil
Project Name:	PLU 342	Sampling Condition:	Cool & Intact
Project Number:	031558506	Sample Received By:	Alyssa Parras
Project Location:	XTO (32.204208-103.862151)		

Sample ID: SS 01 0.5' (H245064-01)

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	08/21/2024	ND	2.19	109	2.00	0.199	
Toluene*	<0.050	0.050	08/21/2024	ND	2.25	113	2.00	1.55	
Ethylbenzene*	<0.050	0.050	08/21/2024	ND	2.26	113	2.00	0.302	
Total Xylenes*	<0.150	0.150	08/21/2024	ND	6.87	115	6.00	0.217	
Total BTEX	<0.300	0.300	08/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 121 % 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	08/22/2024	ND	448	112	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	08/22/2024	ND	197	98.7	200	0.385	
DRO >C10-C28*	<10.0	10.0	08/22/2024	ND	189	94.5	200	1.39	
EXT DRO >C28-C36	<10.0	10.0	08/22/2024	ND					

Surrogate: 1-Chlorooctane 75.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 08/20/2024
 Reported: 08/26/2024
 Project Name: PLU 342
 Project Number: 031558506
 Project Location: XTO (32.204208-103.862151)

Sampling Date: 08/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SS 02 0.5' (H245064-02)

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	08/21/2024	ND	2.19	109	2.00	0.199	
Toluene*	<0.050	0.050	08/21/2024	ND	2.25	113	2.00	1.55	
Ethylbenzene*	<0.050	0.050	08/21/2024	ND	2.26	113	2.00	0.302	
Total Xylenes*	<0.150	0.150	08/21/2024	ND	6.87	115	6.00	0.217	
Total BTEX	<0.300	0.300	08/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 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	08/22/2024	ND	448	112	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	08/22/2024	ND	197	98.7	200	0.385	
DRO >C10-C28*	<10.0	10.0	08/22/2024	ND	189	94.5	200	1.39	
EXT DRO >C28-C36	<10.0	10.0	08/22/2024	ND					

Surrogate: 1-Chlorooctane 78.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 08/20/2024
 Reported: 08/26/2024
 Project Name: PLU 342
 Project Number: 031558506
 Project Location: XTO (32.204208-103.862151)

Sampling Date: 08/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SS 03 0.5' (H245064-03)

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	08/22/2024	ND	2.19	109	2.00	0.199	
Toluene*	<0.050	0.050	08/22/2024	ND	2.25	113	2.00	1.55	
Ethylbenzene*	<0.050	0.050	08/22/2024	ND	2.26	113	2.00	0.302	
Total Xylenes*	<0.150	0.150	08/22/2024	ND	6.87	115	6.00	0.217	
Total BTEX	<0.300	0.300	08/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 121 % 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	08/22/2024	ND	448	112	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	08/22/2024	ND	197	98.7	200	0.385	
DRO >C10-C28*	<10.0	10.0	08/22/2024	ND	189	94.5	200	1.39	
EXT DRO >C28-C36	<10.0	10.0	08/22/2024	ND					

Surrogate: 1-Chlorooctane 77.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 08/20/2024
 Reported: 08/26/2024
 Project Name: PLU 342
 Project Number: 031558506
 Project Location: XTO (32.204208-103.862151)

Sampling Date: 08/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SS 04 0.5' (H245064-04)

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	08/22/2024	ND	2.19	109	2.00	0.199	
Toluene*	<0.050	0.050	08/22/2024	ND	2.25	113	2.00	1.55	
Ethylbenzene*	<0.050	0.050	08/22/2024	ND	2.26	113	2.00	0.302	
Total Xylenes*	<0.150	0.150	08/22/2024	ND	6.87	115	6.00	0.217	
Total BTEX	<0.300	0.300	08/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 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	08/22/2024	ND	448	112	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	08/22/2024	ND	197	98.7	200	0.385	
DRO >C10-C28*	<10.0	10.0	08/22/2024	ND	189	94.5	200	1.39	
EXT DRO >C28-C36	<10.0	10.0	08/22/2024	ND					

Surrogate: 1-Chlorooctane 84.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 08/20/2024
 Reported: 08/26/2024
 Project Name: PLU 342
 Project Number: 031558506
 Project Location: XTO (32.204208-103.862151)

Sampling Date: 08/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SS 05 0.5' (H245064-05)

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	08/22/2024	ND	2.19	109	2.00	0.199	
Toluene*	<0.050	0.050	08/22/2024	ND	2.25	113	2.00	1.55	
Ethylbenzene*	<0.050	0.050	08/22/2024	ND	2.26	113	2.00	0.302	
Total Xylenes*	<0.150	0.150	08/22/2024	ND	6.87	115	6.00	0.217	
Total BTEX	<0.300	0.300	08/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 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	08/22/2024	ND	448	112	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	08/22/2024	ND	197	98.7	200	0.385	
DRO >C10-C28*	<10.0	10.0	08/22/2024	ND	189	94.5	200	1.39	
EXT DRO >C28-C36	<10.0	10.0	08/22/2024	ND					

Surrogate: 1-Chlorooctane 82.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 08/20/2024
 Reported: 08/26/2024
 Project Name: PLU 342
 Project Number: 031558506
 Project Location: XTO (32.204208-103.862151)

Sampling Date: 08/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SS 06 0.5' (H245064-06)

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	08/22/2024	ND	2.19	109	2.00	0.199		
Toluene*	<0.050	0.050	08/22/2024	ND	2.25	113	2.00	1.55		
Ethylbenzene*	<0.050	0.050	08/22/2024	ND	2.26	113	2.00	0.302		
Total Xylenes*	<0.150	0.150	08/22/2024	ND	6.87	115	6.00	0.217		
Total BTEX	<0.300	0.300	08/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 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	08/22/2024	ND	448	112	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	08/22/2024	ND	197	98.7	200	0.385	
DRO >C10-C28*	<10.0	10.0	08/22/2024	ND	189	94.5	200	1.39	
EXT DRO >C28-C36	<10.0	10.0	08/22/2024	ND					

Surrogate: 1-Chlorooctane 81.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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

A handwritten signature in black ink, appearing to read "Mike Snyder", is written over a horizontal line.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC

Project Manager: Tracy Hillard

Address: 601 N Marientfield Street, Suite 400

City: Midland

State: TX Zip: 79701

Phone #: 575-937-3900 Fax #:

Project #: 0301558500 Project Owner:

Project Name: PLU 342

Project Location: 32.204208, -103.802151

Sampler Name: Tracy Hillard M. O'Dell

P.O. #:

Company: XTO Energy

Attn: Amy Ruth

Address: 3104 E. Greene St

City: Carlsbad

State: NM Zip: 88220

Phone #:

Fax #:

FOR LAB USE ONLY

Lab I.D. Sample I.D.

Depth (feet)

#245624

SS01

0.5'

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE TIME

TPH 8015

BTEX 8021

Chloride 4500

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

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 analysis. 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 consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:

Date: 8/20/24

Received By:

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

All Results are emailed. Please provide Email address:

BBell@ensolum.com, TMorrissey@ensolum.com, THillard@ensolum.com

Relinquished By:

Date: 8/20/24

Received By:

REMARKS: Incident #: APP2421837094

Cost Center: 1139421001

Delivered By: (Circle One)

Observed Temp.: 24°C

Sample Condition

CHECKED BY: (Initials)

Turnaround Time: 5 days

Standard

☒

Bacteria (only)

Sample Condition

Cool Intact

Observed Temp. °C

Corrected Temp. °C

Sampler - UPS - Bus - Other:

Corrected Temp. °C

Yes ☒ No ☐

Yes ☒ No ☐

Thermometer ID #119

Rush

☐

Yes ☐ No ☐

Yes ☐ No ☐

Corrected Temp. °C

FORM 000 R3.2 T007121

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

APP 8-20-24



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

August 26, 2024

TRACY HILLARD
ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND, TX 79705

RE: PLU 342

Enclosed are the results of analyses for samples received by the laboratory on 08/20/24 14:48.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene
Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	08/20/2024	Sampling Date:	08/20/2024
Reported:	08/26/2024	Sampling Type:	Soil
Project Name:	PLU 342	Sampling Condition:	Cool & Intact
Project Number:	031558506	Sample Received By:	Alyssa Parras
Project Location:	XTO (32.204208-103.862151)		

Sample ID: SS 07 0.5' (H245066-01)

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	08/22/2024	ND	2.19	109	2.00	0.199	
Toluene*	<0.050	0.050	08/22/2024	ND	2.25	113	2.00	1.55	
Ethylbenzene*	<0.050	0.050	08/22/2024	ND	2.26	113	2.00	0.302	
Total Xylenes*	<0.150	0.150	08/22/2024	ND	6.87	115	6.00	0.217	
Total BTEX	<0.300	0.300	08/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 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	08/22/2024	ND	448	112	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	08/22/2024	ND	203	102	200	0.619	
DRO >C10-C28*	<10.0	10.0	08/22/2024	ND	193	96.4	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	08/22/2024	ND					

Surrogate: 1-Chlorooctane 95.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 08/20/2024
 Reported: 08/26/2024
 Project Name: PLU 342
 Project Number: 031558506
 Project Location: XTO (32.204208-103.862151)

Sampling Date: 08/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SS 08 0.5' (H245066-02)

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	08/22/2024	ND	2.19	109	2.00	0.199	
Toluene*	<0.050	0.050	08/22/2024	ND	2.25	113	2.00	1.55	
Ethylbenzene*	<0.050	0.050	08/22/2024	ND	2.26	113	2.00	0.302	
Total Xylenes*	<0.150	0.150	08/22/2024	ND	6.87	115	6.00	0.217	
Total BTEX	<0.300	0.300	08/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 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	08/22/2024	ND	448	112	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	08/22/2024	ND	203	102	200	0.619	
DRO >C10-C28*	<10.0	10.0	08/22/2024	ND	193	96.4	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	08/22/2024	ND					

Surrogate: 1-Chlorooctane 75.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

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

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

A handwritten signature in black ink, appearing to read "Mike Snyder", is written over a horizontal line.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

October 29, 2024

TACOMA MORRISSEY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU 342

Enclosed are the results of analyses for samples received by the laboratory on 10/25/24 12:06.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/25/2024
Reported: 10/29/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 10/24/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SS 09 0.5 (H246515-01)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2024	ND	2.17	109	2.00	5.35		
Toluene*	<0.050	0.050	10/28/2024	ND	2.27	113	2.00	4.35		
Ethylbenzene*	<0.050	0.050	10/28/2024	ND	2.36	118	2.00	5.00		
Total Xylenes*	<0.150	0.150	10/28/2024	ND	7.02	117	6.00	4.89		
Total BTEx	<0.300	0.300	10/28/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	10/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	207	104	200	5.78	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	199	99.7	200	6.41	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					

Surrogate: 1-Chlorooctane 93.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/25/2024
Reported: 10/29/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 10/24/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH 01 1 (H246515-02)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/28/2024	ND	2.17	109	2.00	5.35	
Toluene*	<0.050	0.050	10/28/2024	ND	2.27	113	2.00	4.35	
Ethylbenzene*	<0.050	0.050	10/28/2024	ND	2.36	118	2.00	5.00	
Total Xylenes*	<0.150	0.150	10/28/2024	ND	7.02	117	6.00	4.89	
Total BTEX	<0.300	0.300	10/28/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	10/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	207	104	200	5.78	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	199	99.7	200	6.41	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					

Surrogate: 1-Chlorooctane 53.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 49.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/25/2024
Reported: 10/29/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 10/24/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SS 10 0.5 (H246515-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/28/2024	ND	2.17	109	2.00	5.35	
Toluene*	<0.050	0.050	10/28/2024	ND	2.27	113	2.00	4.35	
Ethylbenzene*	<0.050	0.050	10/28/2024	ND	2.36	118	2.00	5.00	
Total Xylenes*	<0.150	0.150	10/28/2024	ND	7.02	117	6.00	4.89	
Total BTEX	<0.300	0.300	10/28/2024	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	10/28/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	207	104	200	5.78	
DRO >C10-C28*	1270	10.0	10/26/2024	ND	199	99.7	200	6.41	
EXT DRO >C28-C36	472	10.0	10/26/2024	ND					

Surrogate: 1-Chlorooctane 95.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/25/2024
Reported: 10/29/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 10/24/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH 04 1 (H246515-04)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2024	ND	2.17	109	2.00	5.35		
Toluene*	<0.050	0.050	10/28/2024	ND	2.27	113	2.00	4.35		
Ethylbenzene*	<0.050	0.050	10/28/2024	ND	2.36	118	2.00	5.00		
Total Xylenes*	<0.150	0.150	10/28/2024	ND	7.02	117	6.00	4.89		
Total BTX	<0.300	0.300	10/28/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	207	104	200	5.78	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	199	99.7	200	6.41	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					

Surrogate: 1-Chlorooctane 94.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/25/2024
Reported: 10/29/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 10/24/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH 04A 2 (H246515-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2024	ND	2.17	109	2.00	5.35		
Toluene*	<0.050	0.050	10/28/2024	ND	2.27	113	2.00	4.35		
Ethylbenzene*	<0.050	0.050	10/28/2024	ND	2.36	118	2.00	5.00		
Total Xylenes*	<0.150	0.150	10/28/2024	ND	7.02	117	6.00	4.89		
Total BTEX	<0.300	0.300	10/28/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	10/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	207	104	200	5.78	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	199	99.7	200	6.41	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					

Surrogate: 1-Chlorooctane 81.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 10/25/2024
Reported: 10/29/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 10/24/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SS 11 0.5 (H246515-06)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/28/2024	ND	2.17	109	2.00	5.35	
Toluene*	<0.050	0.050	10/28/2024	ND	2.27	113	2.00	4.35	
Ethylbenzene*	<0.050	0.050	10/28/2024	ND	2.36	118	2.00	5.00	
Total Xylenes*	<0.150	0.150	10/28/2024	ND	7.02	117	6.00	4.89	
Total BTEx	<0.300	0.300	10/28/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	10/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	207	104	200	5.78	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	199	99.7	200	6.41	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					

Surrogate: 1-Chlorooctane 96.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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

A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

November 11, 2024

TACOMA MORRISSEY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU 342

Enclosed are the results of analyses for samples received by the laboratory on 11/07/24 14:10.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/07/2024
Reported: 11/11/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 11/06/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH 01 D 4' (H246796-01)

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	11/08/2024	ND	1.74	87.2	2.00	21.9		
Toluene*	<0.050	0.050	11/08/2024	ND	1.69	84.6	2.00	20.7		
Ethylbenzene*	<0.050	0.050	11/08/2024	ND	1.70	84.8	2.00	20.1		
Total Xylenes*	<0.150	0.150	11/08/2024	ND	5.00	83.4	6.00	20.4		
Total BTEx	<0.300	0.300	11/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 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	64.0	16.0	11/11/2024	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	11/08/2024	ND	201	101	200	0.230	
DRO >C10-C28*	<10.0	10.0	11/08/2024	ND	193	96.4	200	0.774	
EXT DRO >C28-C36	<10.0	10.0	11/08/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/07/2024
Reported: 11/11/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 11/06/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH 02 D 4' (H246796-02)

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	11/08/2024	ND	1.74	87.2	2.00	21.9		
Toluene*	<0.050	0.050	11/08/2024	ND	1.69	84.6	2.00	20.7		
Ethylbenzene*	<0.050	0.050	11/08/2024	ND	1.70	84.8	2.00	20.1		
Total Xylenes*	<0.150	0.150	11/08/2024	ND	5.00	83.4	6.00	20.4		
Total BTEx	<0.300	0.300	11/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	11/11/2024	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	11/08/2024	ND	201	101	200	0.230	
DRO >C10-C28*	<10.0	10.0	11/08/2024	ND	193	96.4	200	0.774	
EXT DRO >C28-C36	<10.0	10.0	11/08/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/07/2024
Reported: 11/11/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 11/06/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH 03 B 2' (H246796-03)

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	11/08/2024	ND	1.74	87.2	2.00	21.9		
Toluene*	<0.050	0.050	11/08/2024	ND	1.69	84.6	2.00	20.7		
Ethylbenzene*	<0.050	0.050	11/08/2024	ND	1.70	84.8	2.00	20.1		
Total Xylenes*	<0.150	0.150	11/08/2024	ND	5.00	83.4	6.00	20.4		
Total BTEX	<0.300	0.300	11/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 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	144	16.0	11/11/2024	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	11/08/2024	ND	201	101	200	0.230	
DRO >C10-C28*	<10.0	10.0	11/08/2024	ND	193	96.4	200	0.774	
EXT DRO >C28-C36	<10.0	10.0	11/08/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/07/2024
Reported: 11/11/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 11/06/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH 03 E 5' (H246796-04)

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	11/08/2024	ND	1.74	87.2	2.00	21.9		
Toluene*	<0.050	0.050	11/08/2024	ND	1.69	84.6	2.00	20.7		
Ethylbenzene*	<0.050	0.050	11/08/2024	ND	1.70	84.8	2.00	20.1		
Total Xylenes*	<0.150	0.150	11/08/2024	ND	5.00	83.4	6.00	20.4		
Total BTEX	<0.300	0.300	11/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.7 % 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	1390	16.0	11/11/2024	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	11/08/2024	ND	201	101	200	0.230	
DRO >C10-C28*	<10.0	10.0	11/08/2024	ND	193	96.4	200	0.774	
EXT DRO >C28-C36	<10.0	10.0	11/08/2024	ND					

Surrogate: 1-Chlorooctane 94.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/07/2024
Reported: 11/11/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 11/06/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH 03 F 6' (H246796-05)

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	11/08/2024	ND	1.74	87.2	2.00	21.9		
Toluene*	<0.050	0.050	11/08/2024	ND	1.69	84.6	2.00	20.7		
Ethylbenzene*	<0.050	0.050	11/08/2024	ND	1.70	84.8	2.00	20.1		
Total Xylenes*	<0.150	0.150	11/08/2024	ND	5.00	83.4	6.00	20.4		
Total BTEX	<0.300	0.300	11/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 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	928	16.0	11/11/2024	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	11/08/2024	ND	201	101	200	0.230	
DRO >C10-C28*	11.3	10.0	11/08/2024	ND	193	96.4	200	0.774	
EXT DRO >C28-C36	<10.0	10.0	11/08/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/07/2024
Reported: 11/11/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 11/05/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH 04 D 4' (H246796-06)

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	11/08/2024	ND	1.74	87.2	2.00	21.9	
Toluene*	<0.050	0.050	11/08/2024	ND	1.69	84.6	2.00	20.7	
Ethylbenzene*	<0.050	0.050	11/08/2024	ND	1.70	84.8	2.00	20.1	
Total Xylenes*	<0.150	0.150	11/08/2024	ND	5.00	83.4	6.00	20.4	
Total BTEX	<0.300	0.300	11/08/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.2 % 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	272	16.0	11/11/2024	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	11/08/2024	ND	201	101	200	0.230	
DRO >C10-C28*	<10.0	10.0	11/08/2024	ND	193	96.4	200	0.774	
EXT DRO >C28-C36	<10.0	10.0	11/08/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/07/2024
Reported: 11/11/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO

Sampling Date: 11/05/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH 05 D 4' (H246796-07)

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	11/08/2024	ND	1.74	87.2	2.00	21.9	
Toluene*	<0.050	0.050	11/08/2024	ND	1.69	84.6	2.00	20.7	
Ethylbenzene*	<0.050	0.050	11/08/2024	ND	1.70	84.8	2.00	20.1	
Total Xylenes*	<0.150	0.150	11/08/2024	ND	5.00	83.4	6.00	20.4	
Total BTEx	<0.300	0.300	11/08/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/11/2024	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	11/08/2024	ND	201	101	200	0.230	
DRO >C10-C28*	<10.0	10.0	11/08/2024	ND	193	96.4	200	0.774	
EXT DRO >C28-C36	<10.0	10.0	11/08/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

Cardinal Laboratories

*=Accredited Analyte

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

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

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

REMARKS: tmmrnsesolun.com, kthwngssn@ensolun.com



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

December 30, 2024

TACOMA MORRISSEY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU 342

Enclosed are the results of analyses for samples received by the laboratory on 12/20/24 11:20.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Snyder".

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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:	12/20/2024	Sampling Date:	12/19/2024
Reported:	12/30/2024	Sampling Type:	Soil
Project Name:	PLU 342	Sampling Condition:	Cool & Intact
Project Number:	03C1558506	Sample Received By:	Tamara Oldaker
Project Location:	XTO - 32.204208-103.862151		

Sample ID: CS 01 0.5' (H247730-01)

BTX 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/24/2024	ND	1.64	82.2	2.00	9.84	
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0	
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95	
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91	
Total BTX	<0.300	0.300	12/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 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	32.0	16.0	12/26/2024	ND	432	108	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 127 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 02 0.5' (H247730-02)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEX	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 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	16.0	16.0	12/26/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 03 0.5' (H247730-03)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEx	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	12/26/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 04 0.5' (H247730-04)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEX	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 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	<16.0	16.0	12/26/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 117 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 05 0.5' (H247730-05)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEx	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 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	16.0	16.0	12/26/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 06 0.5' (H247730-06)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEx	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/26/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 07 0.5' (H247730-07)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEx	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/26/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 131 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 08 0.5' (H247730-08)

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	12/24/2024	ND	1.64	82.2	2.00	9.84	
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0	
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95	
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91	
Total BTEX	<0.300	0.300	12/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 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	32.0	16.0	12/26/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	72.9	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	19.9	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 09 0.5' (H247730-09)

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	12/24/2024	ND	1.64	82.2	2.00	9.84	
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0	
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95	
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91	
Total BTEX	<0.300	0.300	12/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	12/26/2024	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	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 130 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 10 0.5' (H247730-10)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEx	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	768	16.0	12/26/2024	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	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 11 0.5' (H247730-11)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEX	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	12/26/2024	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	12/26/2024	ND	195	97.5	200	3.40	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	183	91.4	200	13.8	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 130 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 12 0.5' (H247730-12)

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	12/24/2024	ND	1.64	82.2	2.00	9.84		
Toluene*	<0.050	0.050	12/24/2024	ND	1.71	85.7	2.00	10.0		
Ethylbenzene*	<0.050	0.050	12/24/2024	ND	1.67	83.7	2.00	9.95		
Total Xylenes*	<0.150	0.150	12/24/2024	ND	4.91	81.8	6.00	9.91		
Total BTEX	<0.300	0.300	12/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 87.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 13 0.5' (H247730-13)

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	12/26/2024	ND	1.80	90.0	2.00	0.884	
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595	
Total BTEx	<0.300	0.300	12/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 85.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 14 0.5' (H247730-14)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 85.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 15 0.5' (H247730-15)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 16 0.5' (H247730-16)

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	12/26/2024	ND	1.80	90.0	2.00	0.884	
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595	
Total BTEX	<0.300	0.300	12/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	670	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	377	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 135 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 17 0.5' (H247730-17)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	612	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	363	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 99.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 18 0.5' (H247730-18)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 91.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 19 0.5' (H247730-19)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	670	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	377	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 98.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 20 0.5' (H247730-20)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 21 0.5' (H247730-21)

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	12/26/2024	ND	1.80	90.0	2.00	0.884	
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595	
Total BTEX	<0.300	0.300	12/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 87.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 22 0.5' (H247730-22)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/26/2024	ND	1.80	90.0	2.00	0.884	
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595	
Total BTX	<0.300	0.300	12/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 85.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 23 0.5' (H247730-23)

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	12/26/2024	ND	1.80	90.0	2.00	0.884	
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595	
Total BTEX	<0.300	0.300	12/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 24 0.5' (H247730-24)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 25 0.5' (H247730-25)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 26 0.5' (H247730-26)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	138	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	74.5	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 136 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 27 0.5' (H247730-27)

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	12/26/2024	ND	1.80	90.0	2.00	0.884	
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595	
Total BTEX	<0.300	0.300	12/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	79.4	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	34.9	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 28 0.5' (H247730-28)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/26/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	35.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	18.3	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 29 0.5' (H247730-29)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 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	12/27/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	14.8	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 30 0.5' (H247730-30)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 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	48.0	16.0	12/27/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 133 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 31 0.5' (H247730-31)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 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	12/27/2024	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	12/26/2024	ND	205	102	200	2.88	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	169	84.4	200	6.14	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/19/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 32 0.5' (H247730-32)

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	12/26/2024	ND	1.80	90.0	2.00	0.884		
Toluene*	<0.050	0.050	12/26/2024	ND	1.87	93.6	2.00	0.313		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	1.82	91.0	2.00	0.398		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	5.31	88.5	6.00	0.595		
Total BTEX	<0.300	0.300	12/26/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 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	32.0	16.0	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 130 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 33 0.5' (H247730-33)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/26/2024	ND	2.08	104	2.00	0.0663		
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539		
Total BTX	<0.300	0.300	12/26/2024	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	96.0	16.0	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 34 0.5' (H247730-34)

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	12/26/2024	ND	2.08	104	2.00	0.0663		
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539		
Total BTEX	<0.300	0.300	12/26/2024	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	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 35 0.5' (H247730-35)

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	12/26/2024	ND	2.08	104	2.00	0.0663		
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539		
Total BTEX	<0.300	0.300	12/26/2024	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	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 96.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.9 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 36 0.5' (H247730-36)

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	12/26/2024	ND	2.08	104	2.00	0.0663		
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539		
Total BTEX	<0.300	0.300	12/26/2024	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	208	16.0	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 37 0.5' (H247730-37)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/26/2024	ND	2.08	104	2.00	0.0663	
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539	
Total BTX	<0.300	0.300	12/26/2024	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	192	16.0	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 38 0.5' (H247730-38)

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	12/26/2024	ND	2.08	104	2.00	0.0663		
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474		
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151		
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539		
Total BTEX	<0.300	0.300	12/26/2024	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	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 127 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 39 0.5' (H247730-39)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/26/2024	ND	2.08	104	2.00	0.0663	
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539	
Total BTX	<0.300	0.300	12/26/2024	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	48.0	16.0	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 40 0.5' (H247730-40)

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	12/26/2024	ND	2.08	104	2.00	0.0663	
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539	
Total BTEX	<0.300	0.300	12/26/2024	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	112	16.0	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 127 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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: 12/20/2024
Reported: 12/30/2024
Project Name: PLU 342
Project Number: 03C1558506
Project Location: XTO - 32.204208-103.862151

Sampling Date: 12/20/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CS 41 0.5' (H247730-41)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/26/2024	ND	2.08	104	2.00	0.0663	
Toluene*	<0.050	0.050	12/26/2024	ND	2.09	104	2.00	0.0474	
Ethylbenzene*	<0.050	0.050	12/26/2024	ND	2.00	100	2.00	0.151	
Total Xylenes*	<0.150	0.150	12/26/2024	ND	6.40	107	6.00	0.539	
Total BTX	<0.300	0.300	12/26/2024	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	192	16.0	12/27/2024	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	12/26/2024	ND	202	101	200	0.0906	
DRO >C10-C28*	<10.0	10.0	12/26/2024	ND	187	93.4	200	0.730	
EXT DRO >C28-C36	<10.0	10.0	12/26/2024	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- 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

Cardinal Laboratories

*=Accredited Analyte

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

A handwritten signature in black ink, appearing to read "Mike Snyder".

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC Project Manager: <i>Theresa Morrissey</i> Address: 3122 National Parks Hwy City: Carlsbad State: NM Zip: 88220 Phone #: 331 251 4307 Fax #: Project #: 034554506 Project Owner: XTO Project Name: PLU 342 Project Location: 32.201206, -103.462151 Sampler Name: Joshua Boxley				P.O. #: Company: XTO Energy Inc Attn: Colton Brown Address: 3104 E Green St City: Carlsbad State: NM Zip: 88220 Phone #: Fax #:			
FOR LAB USE ONLY				BILL TO			
Lab I.D.		Sample I.D.		Depth (feet)		DATE	
<i>H247730</i>		<i>CS01</i>		<i>0.5</i>		<i>12.19.24</i>	
<i>CS02</i>		<i>CS03</i>		<i>CS04</i>		<i>CS05</i>	
<i>CS06</i>		<i>CS07</i>		<i>CS08</i>		<i>CS09</i>	
<i>CS10</i>		<i>CS11</i>		<i>CS12</i>		<i>CS13</i>	
<i>CS14</i>		<i>CS15</i>		<i>CS16</i>		<i>CS17</i>	
<i>CS18</i>		<i>CS19</i>		<i>CS20</i>		<i>CS21</i>	
<i>CS22</i>		<i>CS23</i>		<i>CS24</i>		<i>CS25</i>	
<i>CS26</i>		<i>CS27</i>		<i>CS28</i>		<i>CS29</i>	
<i>CS30</i>		<i>CS31</i>		<i>CS32</i>		<i>CS33</i>	
<i>CS34</i>		<i>CS35</i>		<i>CS36</i>		<i>CS37</i>	
<i>CS38</i>		<i>CS39</i>		<i>CS40</i>		<i>CS41</i>	
<i>CS42</i>		<i>CS43</i>		<i>CS44</i>		<i>CS45</i>	
<i>CS46</i>		<i>CS47</i>		<i>CS48</i>		<i>CS49</i>	
<i>CS50</i>		<i>CS51</i>		<i>CS52</i>		<i>CS53</i>	
<i>CS54</i>		<i>CS55</i>		<i>CS56</i>		<i>CS57</i>	
<i>CS58</i>		<i>CS59</i>		<i>CS60</i>		<i>CS61</i>	
<i>CS62</i>		<i>CS63</i>		<i>CS64</i>		<i>CS65</i>	
<i>CS66</i>		<i>CS67</i>		<i>CS68</i>		<i>CS69</i>	
<i>CS70</i>		<i>CS71</i>		<i>CS72</i>		<i>CS73</i>	
<i>CS74</i>		<i>CS75</i>		<i>CS76</i>		<i>CS77</i>	
<i>CS78</i>		<i>CS79</i>		<i>CS80</i>		<i>CS81</i>	
<i>CS82</i>		<i>CS83</i>		<i>CS84</i>		<i>CS85</i>	
<i>CS86</i>		<i>CS87</i>		<i>CS88</i>		<i>CS89</i>	
<i>CS90</i>		<i>CS91</i>		<i>CS92</i>		<i>CS93</i>	
<i>CS94</i>		<i>CS95</i>		<i>CS96</i>		<i>CS97</i>	
<i>CS98</i>		<i>CS99</i>		<i>CS100</i>		<i>CS101</i>	
<i>CS102</i>		<i>CS103</i>		<i>CS104</i>		<i>CS105</i>	
<i>CS106</i>		<i>CS107</i>		<i>CS108</i>		<i>CS109</i>	
<i>CS110</i>		<i>CS111</i>		<i>CS112</i>		<i>CS113</i>	
<i>CS114</i>		<i>CS115</i>		<i>CS116</i>		<i>CS117</i>	
<i>CS118</i>		<i>CS119</i>		<i>CS120</i>		<i>CS121</i>	
<i>CS122</i>		<i>CS123</i>		<i>CS124</i>		<i>CS125</i>	
<i>CS126</i>		<i>CS127</i>		<i>CS128</i>		<i>CS129</i>	
<i>CS130</i>		<i>CS131</i>		<i>CS132</i>		<i>CS133</i>	
<i>CS134</i>		<i>CS135</i>		<i>CS136</i>		<i>CS137</i>	
<i>CS138</i>		<i>CS139</i>		<i>CS140</i>		<i>CS141</i>	
<i>CS142</i>		<i>CS143</i>		<i>CS144</i>		<i>CS145</i>	
<i>CS146</i>		<i>CS147</i>		<i>CS148</i>		<i>CS149</i>	
<i>CS150</i>		<i>CS151</i>		<i>CS152</i>		<i>CS153</i>	
<i>CS154</i>		<i>CS155</i>		<i>CS156</i>		<i>CS157</i>	
<i>CS158</i>		<i>CS159</i>		<i>CS160</i>		<i>CS161</i>	
<i>CS162</i>		<i>CS163</i>		<i>CS164</i>		<i>CS165</i>	
<i>CS166</i>							



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

245



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

385

Company Name: Ensolum, LLC				BILL TO				ANALYSIS REQUEST			
Project Manager: <i>Teresa Morrissey</i>				P.O. #:							
Address: 3122 National Highway Park Hwy				Company: XTO Energy Inc							
City: Midland, Colorado State: TX Zip: 79701				Attn: Celen Brown							
Phone #: 337257 8307 Fax #:				Address: 3121 E Green St							
Project #: 0301558506 Project Owner: XTO				City: Colorado State: NM Zip: 88220							
Project Name: PLU 342				Phone #:							
Project Location: 32.204208, -103.862151				Fax #:							
Sampler Name: <i>Joshua Bradley</i>				MATRIX				PRESERV			
FOR LAB USE ONLY				GROUNDWATER				WASTEWATER			
SOIL				OIL				SLUDGE			
OTHER :				ACID/BASE:				ICE / COOL			
OTHER :				DATE				TIME			
Lab I.D.				Sample I.D.				Depth (feet)			
H247730				CS21				0.5			
31				CS22				1345			
32				CS23				1350			
33				CS24				1355			
34				CS25				1410			
35				CS26				1415			
36				CS27				1420			
37				CS28				1425			
38				CS29				1435			
39				CS30				1440			
40											
Relinquished By: <i>[Signature]</i>				Date: 12-20-24				Time: 11:30			
Received By: <i>[Signature]</i>				Date: 12-20-24				Time: 11:30			
Relinquished By: <i>[Signature]</i>				Date: 12-20-24				Time: 11:30			
Received By: <i>[Signature]</i>				Date: 12-20-24				Time: 11:30			
Delivered By: (Circle One)				Observed Temp. °C				Sample Condition			
Sampler - UPS - Bus - Other:				Corrected Temp. °C				Cool Intact			
Turnaround Time: 5 days				Standard				Bacteria (only)			
Thermometer ID #418				Rush				Cool Intact			
Correction Factor -0.5°C				12/20/24				Observed Temp. °C			
Corrected Temp. °C											
Remarks: <i>inadept: NAPP 240714 36506 CC-1139421001</i>											
Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Phone #:							
All Results are emailed. Please provide Email address:											
Morrissett@ensolum.com, KThompson@ensolum.com											

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

4 of 5

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC

Project Manager: Tacuma Morrissey

Address: 3122 National Parks Hwy

City: Midland-Carlisle State: TX Zip: 79720

Phone #: 331 251 8307 Fax #:

Project #: 03C1558506 Project Owner: KFO

Project Name: PLU 342

Project Location: 32.204208 -103.862151

Sample Name: Testua Boxley

P.O. #:

Company: XTO Energy Inc

Attn: Colton Brown

Address: 3104 E. Green St

City: Carlisle

State: NM Zip: 88220

Phone #:

Fax #:

FOR LAB USE ONLY

Lab I.D. Sample I.D.

Depth (feet)

H247730

31

32

33

34

35

36

37

38

39

40

CS1

CS2

CS3

CS4

CS5

CS6

CS7

CS8

CS9

CS10

0.5

1

1

1

1

1

1

1

1

1

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840

12.19.24

1445

12.10.24

1500

12.20.24

0755

0800

0805

0810

0810

0830

0835

12.20.24

0840



585

Page 48 of 48

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

February 06, 2025

BEN BELILL

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: PLU 342

Enclosed are the results of analyses for samples received by the laboratory on 02/03/25 12:00.

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/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS 01 7'	H250600-01	Soil	27-Jan-25 09:55	03-Feb-25 12:00
CS 16 0.5	H250600-02	Soil	28-Jan-25 12:55	03-Feb-25 12:00
CS 19 0.5	H250600-03	Soil	28-Jan-25 13:21	03-Feb-25 12:00
FS 02 1.5	H250600-04	Soil	28-Jan-25 13:05	03-Feb-25 12:00
FS 03 1.5	H250600-05	Soil	29-Jan-25 09:40	03-Feb-25 12:00
FS 04 1.5	H250600-06	Soil	29-Jan-25 09:38	03-Feb-25 12:00
SW 02 0-1.5	H250600-07	Soil	29-Jan-25 10:25	03-Feb-25 12:00
CS 42 0.5	H250600-08	Soil	29-Jan-25 10:12	03-Feb-25 12:00
SW 03 0-1.5	H250600-09	Soil	29-Jan-25 10:32	03-Feb-25 12:00
SW 04 0-1.5	H250600-10	Soil	29-Jan-25 10:39	03-Feb-25 12:00
SW 01 0-4	H250600-11	Soil	29-Jan-25 15:05	03-Feb-25 12:00
SW 05 4-7	H250600-12	Soil	29-Jan-25 14:05	03-Feb-25 12:00

02/06/25 - Client changed some of the sample IDs (see COC). This is the revised report and will replace the one sent on 02/04/25.

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

FS 01 7'
H250600-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	432		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050	0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

Surrogate: 4-Bromofluorobenzene (PID)		111 %		71.5-134	5020329	JH	03-Feb-25	8021B	
---------------------------------------	--	-------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	

Surrogate: 1-Chlorooctane		89.5 %		48.2-134	5020321	MS	03-Feb-25	8015B	
---------------------------	--	--------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane		87.9 %		49.1-148	5020321	MS	03-Feb-25	8015B	
-------------------------------	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

CS 16 0.5
H250600-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	352		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			109 %		71.5-134	5020329	JH	03-Feb-25	8021B	
---------------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	

Surrogate: 1-Chlorooctane			87.1 %		48.2-134	5020321	MS	03-Feb-25	8015B	
---------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			85.6 %		49.1-148	5020321	MS	03-Feb-25	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

CS 19 0.5
H250600-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	176		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			112 %		71.5-134	5020329	JH	03-Feb-25	8021B	
--	--	--	-------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	

<i>Surrogate: 1-Chlorooctane</i>			85.6 %		48.2-134	5020321	MS	03-Feb-25	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			84.5 %		49.1-148	5020321	MS	03-Feb-25	8015B	
--------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

FS 02 1.5
H250600-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	304		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050	0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	110 %	71.5-134	5020329	JH	03-Feb-25	8021B
---------------------------------------	-------	----------	---------	----	-----------	-------

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B
DRO >C10-C28*	<10.0	10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B

Surrogate: 1-Chlorooctane	68.7 %	48.2-134	5020321	MS	03-Feb-25	8015B
---------------------------	--------	----------	---------	----	-----------	-------

Surrogate: 1-Chlorooctadecane	66.9 %	49.1-148	5020321	MS	03-Feb-25	8015B
-------------------------------	--------	----------	---------	----	-----------	-------

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

FS 03 1.5
H250600-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	96.0		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			110 %	71.5-134		5020329	JH	03-Feb-25	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	

<i>Surrogate: 1-Chlorooctane</i>			86.7 %	48.2-134		5020321	MS	03-Feb-25	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			85.3 %	49.1-148		5020321	MS	03-Feb-25	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

FS 04 1.5
H250600-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	112		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			111 %	71.5-134		5020329	JH	03-Feb-25	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	

<i>Surrogate: 1-Chlorooctane</i>			82.6 %	48.2-134		5020321	MS	03-Feb-25	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			80.2 %	49.1-148		5020321	MS	03-Feb-25	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

SW 02 0-1.5
H250600-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	400		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			109 %	71.5-134		5020329	JH	03-Feb-25	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	

<i>Surrogate: 1-Chlorooctane</i>			73.1 %	48.2-134		5020321	MS	03-Feb-25	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			70.7 %	49.1-148		5020321	MS	03-Feb-25	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

CS 42 0.5
H250600-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	160		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			109 %	71.5-134		5020329	JH	03-Feb-25	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	

<i>Surrogate: 1-Chlorooctane</i>			82.3 %	48.2-134		5020321	MS	03-Feb-25	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			78.4 %	49.1-148		5020321	MS	03-Feb-25	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

SW 03 0-1.5
H250600-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020329	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020329	JH	03-Feb-25	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			111 %		71.5-134	5020329	JH	03-Feb-25	8021B	
---------------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020321	MS	03-Feb-25	8015B	

Surrogate: 1-Chlorooctane			85.9 %		48.2-134	5020321	MS	03-Feb-25	8015B	
---------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			82.4 %		49.1-148	5020321	MS	03-Feb-25	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

SW 04 0-1.5
H250600-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	128		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	QR-03
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	QR-03
Total Xylenes*	<0.150		0.150	mg/kg	50	5020330	JH	03-Feb-25	8021B	QR-03
Total BTEX	<0.300		0.300	mg/kg	50	5020330	JH	03-Feb-25	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134 5020330 JH 03-Feb-25 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	

Surrogate: 1-Chlorooctane 88.5 % 48.2-134 5020322 MS 03-Feb-25 8015B

Surrogate: 1-Chlorooctadecane 87.4 % 49.1-148 5020322 MS 03-Feb-25 8015B

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

SW 01 0-4
H250600-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	464		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020330	JH	03-Feb-25	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			121 %		71.5-134	5020330	JH	03-Feb-25	8021B	
--	--	--	-------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	

<i>Surrogate: 1-Chlorooctane</i>			81.7 %		48.2-134	5020322	MS	03-Feb-25	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			80.3 %		49.1-148	5020322	MS	03-Feb-25	8015B	
--------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

SW 05 4-7
H250600-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	640		16.0	mg/kg	4	5020341	AC	03-Feb-25	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Toluene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	5020330	JH	03-Feb-25	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	5020330	JH	03-Feb-25	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			115 %		71.5-134	5020330	JH	03-Feb-25	8021B	
---------------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	
DRO >C10-C28*	10.3		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	5020322	MS	03-Feb-25	8015B	

Surrogate: 1-Chlorooctane			74.8 %		48.2-134	5020322	MS	03-Feb-25	8015B	
---------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			74.5 %		49.1-148	5020322	MS	03-Feb-25	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 5020341 - 1:4 DI Water									
Blank (5020341-BLK1)				Prepared & Analyzed: 03-Feb-25					
Chloride	ND	16.0	mg/kg						
LCS (5020341-BS1)				Prepared & Analyzed: 03-Feb-25					
Chloride	416	16.0	mg/kg	400		104	80-120		
LCS Dup (5020341-BSD1)				Prepared & Analyzed: 03-Feb-25					
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 5020329 - Volatiles**Blank (5020329-BLK1)**

Prepared & Analyzed: 03-Feb-25

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0547		mg/kg	0.0500		109	71.5-134			

LCS (5020329-BS1)

Prepared & Analyzed: 03-Feb-25

Benzene	1.97	0.050	mg/kg	2.00		98.4	82.8-130			
Toluene	1.99	0.050	mg/kg	2.00		99.4	86-128			
Ethylbenzene	1.99	0.050	mg/kg	2.00		99.5	85.9-128			
m,p-Xylene	4.13	0.100	mg/kg	4.00		103	89-129			
o-Xylene	1.93	0.050	mg/kg	2.00		96.4	86.1-125			
Total Xylenes	6.06	0.150	mg/kg	6.00		101	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0507		mg/kg	0.0500		101	71.5-134			

LCS Dup (5020329-BSD1)

Prepared & Analyzed: 03-Feb-25

Benzene	2.09	0.050	mg/kg	2.00		105	82.8-130	6.16	15.8	
Toluene	2.14	0.050	mg/kg	2.00		107	86-128	7.36	15.9	
Ethylbenzene	2.15	0.050	mg/kg	2.00		108	85.9-128	7.77	16	
m,p-Xylene	4.47	0.100	mg/kg	4.00		112	89-129	7.82	16.2	
o-Xylene	2.09	0.050	mg/kg	2.00		104	86.1-125	7.95	16.7	
Total Xylenes	6.56	0.150	mg/kg	6.00		109	88.2-128	7.86	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0520		mg/kg	0.0500		104	71.5-134			

Batch 5020330 - Volatiles**Blank (5020330-BLK1)**

Prepared & Analyzed: 03-Feb-25

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 5020330 - Volatiles**Blank (5020330-BLK1)**

Prepared & Analyzed: 03-Feb-25

Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0579		mg/kg	0.0500		116	71.5-134			

LCS (5020330-BS1)

Prepared & Analyzed: 03-Feb-25

Benzene	2.20	0.050	mg/kg	2.00		110	82.8-130			
Toluene	2.37	0.050	mg/kg	2.00		118	86-128			
Ethylbenzene	2.41	0.050	mg/kg	2.00		120	85.9-128			
m,p-Xylene	4.70	0.100	mg/kg	4.00		118	89-129			
o-Xylene	2.41	0.050	mg/kg	2.00		121	86.1-125			
Total Xylenes	7.11	0.150	mg/kg	6.00		119	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0545		mg/kg	0.0500		109	71.5-134			

LCS Dup (5020330-BS1)

Prepared & Analyzed: 03-Feb-25

Benzene	2.22	0.050	mg/kg	2.00		111	82.8-130	0.830	15.8	
Toluene	2.36	0.050	mg/kg	2.00		118	86-128	0.0927	15.9	
Ethylbenzene	2.40	0.050	mg/kg	2.00		120	85.9-128	0.409	16	
m,p-Xylene	4.68	0.100	mg/kg	4.00		117	89-129	0.411	16.2	
o-Xylene	2.41	0.050	mg/kg	2.00		120	86.1-125	0.239	16.7	
Total Xylenes	7.09	0.150	mg/kg	6.00		118	88.2-128	0.353	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0544		mg/kg	0.0500		109	71.5-134			

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 5020321 - General Prep - Organics**Blank (5020321-BLK1)**

Prepared & Analyzed: 03-Feb-25

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	54.5		mg/kg	50.0		109	48.2-134			
Surrogate: 1-Chlorooctadecane	54.6		mg/kg	50.0		109	49.1-148			

LCS (5020321-BS1)

Prepared & Analyzed: 03-Feb-25

GRO C6-C10	207	10.0	mg/kg	200		104	81.5-123			
DRO >C10-C28	196	10.0	mg/kg	200		98.1	77.7-122			
Total TPH C6-C28	404	10.0	mg/kg	400		101	80.9-121			
Surrogate: 1-Chlorooctane	54.8		mg/kg	50.0		110	48.2-134			
Surrogate: 1-Chlorooctadecane	53.4		mg/kg	50.0		107	49.1-148			

LCS Dup (5020321-BS1)

Prepared & Analyzed: 03-Feb-25

GRO C6-C10	210	10.0	mg/kg	200		105	81.5-123	1.13	13	
DRO >C10-C28	197	10.0	mg/kg	200		98.3	77.7-122	0.194	15.6	
Total TPH C6-C28	406	10.0	mg/kg	400		102	80.9-121	0.677	18.5	
Surrogate: 1-Chlorooctane	56.1		mg/kg	50.0		112	48.2-134			
Surrogate: 1-Chlorooctadecane	55.1		mg/kg	50.0		110	49.1-148			

Batch 5020322 - General Prep - Organics**Blank (5020322-BLK1)**

Prepared & Analyzed: 03-Feb-25

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	54.7		mg/kg	50.0		109	48.2-134			
Surrogate: 1-Chlorooctadecane	56.5		mg/kg	50.0		113	49.1-148			

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
705 W WADLEY AVE.
MIDLAND TX, 79705

Project: PLU 342
Project Number: 03C1558506
Project Manager: BEN BELILL
Fax To:

Reported:
06-Feb-25 17:28

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 5020322 - General Prep - Organics**LCS (5020322-BS1)**

Prepared & Analyzed: 03-Feb-25

GRO C6-C10	209	10.0	mg/kg	200		104	81.5-123			
DRO >C10-C28	205	10.0	mg/kg	200		103	77.7-122			
Total TPH C6-C28	414	10.0	mg/kg	400		104	80.9-121			
Surrogate: 1-Chlorooctane	56.2		mg/kg	50.0		112	48.2-134			
Surrogate: 1-Chlorooctadecane	56.2		mg/kg	50.0		112	49.1-148			

LCS Dup (5020322-BS1)

Prepared & Analyzed: 03-Feb-25

GRO C6-C10	208	10.0	mg/kg	200		104	81.5-123	0.574	13	
DRO >C10-C28	204	10.0	mg/kg	200		102	77.7-122	0.479	15.6	
Total TPH C6-C28	412	10.0	mg/kg	400		103	80.9-121	0.527	18.5	
Surrogate: 1-Chlorooctane	57.1		mg/kg	50.0		114	48.2-134			
Surrogate: 1-Chlorooctadecane	57.7		mg/kg	50.0		115	49.1-148			

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 446396

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 446396
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2407438506
Incident Name	NAPP2407438506 PLU 342 @ 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	PLU 342
Date Release Discovered	02/27/2024
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: Normal Operations Flow Line - Production Produced Water Released: 24 BBL Recovered: 1 BBL Lost: 23 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.

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 2

Action 446396

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	446396
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	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	False
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	off site spill outside of berms or location

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: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 03/14/2024
--	--

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 3

Action 446396

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	446396
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Site Characterization	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Attached Document
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 ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (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 ½ and 1 (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 ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	640
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	92.8
GRO+DRO (EPA SW-846 Method 8015M)	72.9
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	08/20/2024
On what date will (or did) the final sampling or liner inspection occur	01/29/2025
On what date will (or was) the remediation complete(d)	01/29/2025
What is the estimated surface area (in square feet) that will be reclaimed	823
What is the estimated volume (in cubic yards) that will be reclaimed	50
What is the estimated surface area (in square feet) that will be remediated	823
What is the estimated volume (in cubic yards) that will be remediated	80
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 4

Action 446396

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	446396
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 03/27/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 5

Action 446396

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 446396
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 6

Action 446396

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 446396
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	436520
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/04/2025
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	823
What was the total volume (cubic yards) remediated	80
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	823
What was the total volume (in cubic yards) reclaimed	50
Summarize any additional remediation activities not included by answers (above)	Site assessment, delineation, and excavation activities were conducted at the Site to address the February 27, 2024, release of produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, and confirmation soil samples, collected from the surface of the release extent, indicated that all COC concentrations were compliant with the Closure Criteria. Based on the soil sample analytical results, no further remediation was required. The disturbed ROW will be re-seeded with an approved BLM seed mixture. Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number nAPP2407438506.

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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 03/27/2025
--	--

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 7

Action 446396

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 446396
	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

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 446396

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 446396
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2407438506 PLU 342, thank you. This Remediation Closure Report is approved.	3/28/2025