ENSOLUM

January 2, 2025

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

Re: Remediation Work Plan
Row 5 West Booster Station
Incident Number NAPP2428259758
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Remediation Work Plan* (*Work Plan*) to document the site assessment activities completed to date and propose a work plan to address impacted soil identified at the Row 5 West Booster Station (Site). The purpose of the site assessment activities was to delineate the lateral and vertical extent of impacted soil resulting from a release of produced water at the Site. The following *Work Plan* proposes to excavate impacted soil within the top 4 feet of the release extent.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 20, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.1142303°, -103.9071374°) and is associated with oil and gas exploration and production operations on Federal land managed by the Bureau of Land Management (BLM).

On October 8, 2024, a pump failed resulting in the release of 187 barrels (bbls) of produced water onto the pad. No fluids were recovered. XTO immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via Notification of Release (NOR) submitted on October 8, 2024, and subsequently submitted the Initial C-141 Application (C-141) on October 9, 2024. The release was assigned Incident Number NAPP2428259758.

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 greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. In Febuary 2020, a New Mexico Office of the State Engineer (NMOSE) permitted well (C-4394), located approximately 0.44 miles west of the Site, was advanced to a depth of 110 feet bgs . Depth to groundwater is documented to be greater than 110 feet bgs. The Well Record is included in Appendix A and all referenced wells are depicted on Figure 1.

The closest continuously flowing or significant watercourse to the Site is a dry wash located approximately 1,072 feet southeast 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 underlain by stable geology (low potential karst designation area).

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

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

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

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On October 31, 2024 Ensolum personnel conducted a Site visit to evaluate the release extent based on information provided on the C-141 and visual observations. Ensolum personnel collected fourteen delineation soil samples (SS01 through SS14) within and around the release extent from a depth of 0.5 feet bgs to assess the lateral extent of the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix B.

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

On November 21, 2024, Ensolum personnel returned to the Site to oversee vertical delineation of the release extent. Delineation boreholes BH01 through BH08 were advanced in the approximate locations of SS01through SS08, respectively. The delineation boreholes were advanced via hand auger to a maximum depth of 9 feet bgs. Discrete soil samples were collected from each borehole at depths ranging from 1-foot bgs to 9 feet bgs. Soil from the boreholes was field screened for VOCs and chloride. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix C. Delineation soil samples from each borehole, at depths ranging from 1 foot bgs to 9 feet bgs were collected, handled and analyzed as described above at Cardinal in Hobbs, New Mexico. The soil sample locations are depicted on Figure 2.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples SS01/BH01 through SS08/BH08 indicated that TPH-GRO/TPH-DRO, TPH, and/or chloride concentrations exceeded the Closure Criteria and/or reclamation requirement at depths ranging from 0.5 feet to 4 feet bgs. Laboratory analytical results for delineation soil samples SS06/BH06 and SS08/BH08 collected at 5 feet and 6 feet bgs, respectively, indicated that all COC concentrations were in compliance with the strictest Table I Closure Criteria, successfully defining the vertical extent of the release. In addition, laboratory analytical results for delineation soil samples SS09 through SS14 collected outside of the release extent indicated concentrations of all COCs were compliant with the Closure Criteria and reclamation requirement and successfully defined the lateral extent of the release. Laboratory analytical results are summarized in Table 1 and the Laboratory Analytical Reports & Chain-of-Custody Documentation are presented in Appendix D.

PROPOSED REMEDIATION WORK PLAN

The delineation soil sampling results indicate soil containing elevated TPH-GRO/TPH-DRO, TPH, and/or chloride concentrations exists across an approximate 72,456 square foot area and extends to a maximum depth of 4 feet bgs. XTO proposes to complete the following remediation activities:

- Excavation of waste-containing and impacted soil to a depth of 4 feet bgs. Excavation will proceed laterally until sidewall samples confirm all COC concentrations are compliant with the strictest Table I Closure Criteria.
- An estimated 10,734 cubic yards of waste-containing and impacted soil will be excavated. The excavated soil will be transferred a New Mexico approved landfill facility for disposal.
- Following excavation and a review of confirmation soil sampling results indicating all waste-containing and impacted soil has been removed, the excavation will be backfilled and recontoured to match pre-existing conditions and reseeded with a BLM approved seed mixture.

Due to the estimated 72,456 square foot size of the excavation, XTO requests a variance for frequency of excavation confirmation samples. XTO proposes the frequency of confirmation sampling for the excavation floor to be decreased from every 200 square feet (approximately 362 samples) to every 400 square feet (approximately 181 samples). Each 5-point composite floor sample will represent a 400 square foot area. The proposed sampling grid and approximate excavation extent is depicted on Figure 3. Sidewall samples in areas of the excavation in the pasture which are anticipated to be as deep as 4 feet bgs will be collected at a frequency of every 200 square feet (approximately 11 samples). The soil samples will be handled as described above and analyzed for all COCs at Cardinal in Hobbs, New Mexico.

XTO will proceed with the excavation and soil sampling activities and will submit a Closure Report within 90 days of the date of approval of this Work Plan by the NMOCD.

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

Sincerely,
Ensolum, LLC

Jesse Dorman
Associate Geologist

Tacoma Morrissey, MS
Associate Principal

cc: Colton Brown, XTO
Kaylan Dirkx, XTO
BLM

Appendices:

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

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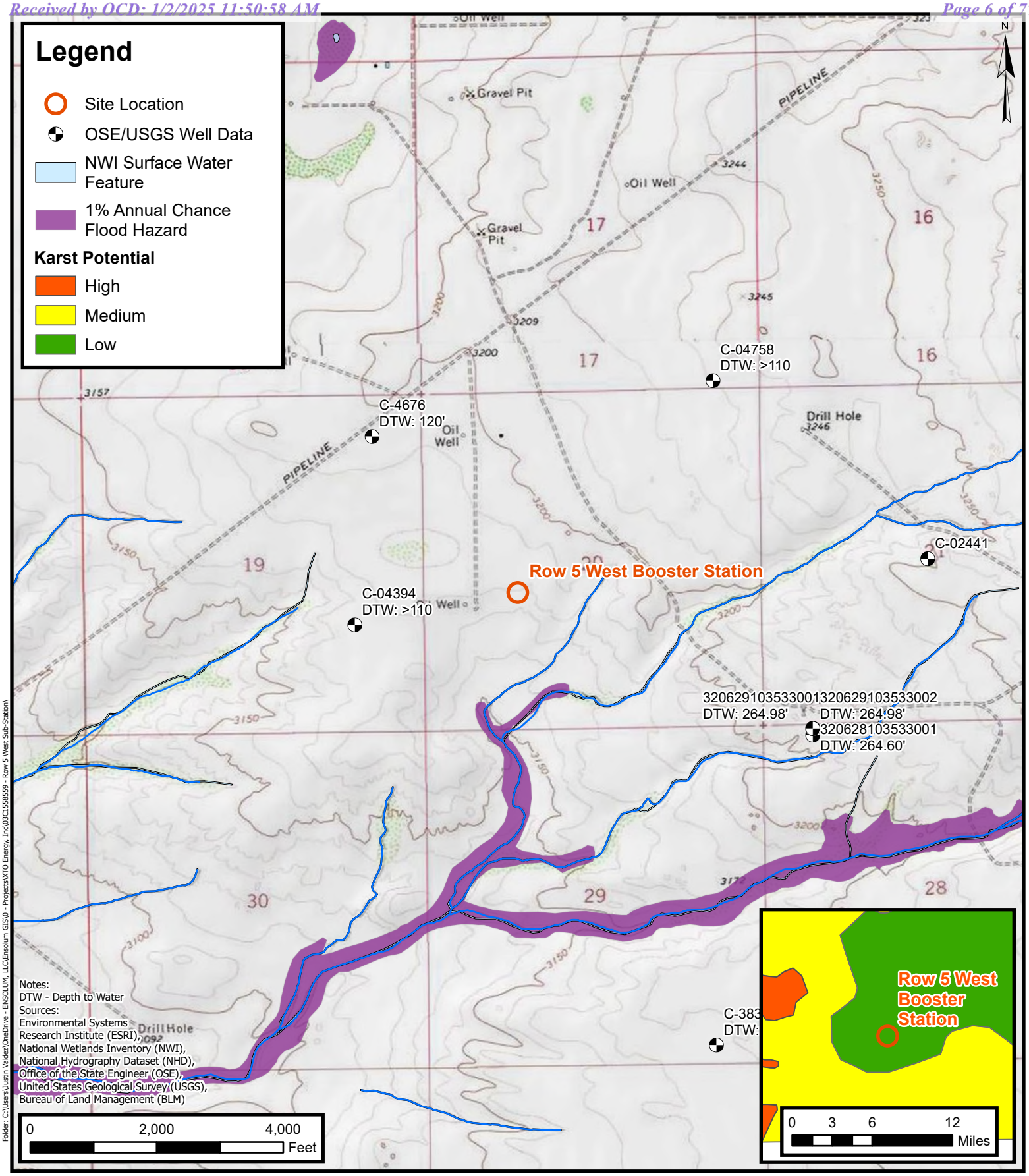
FIGURES



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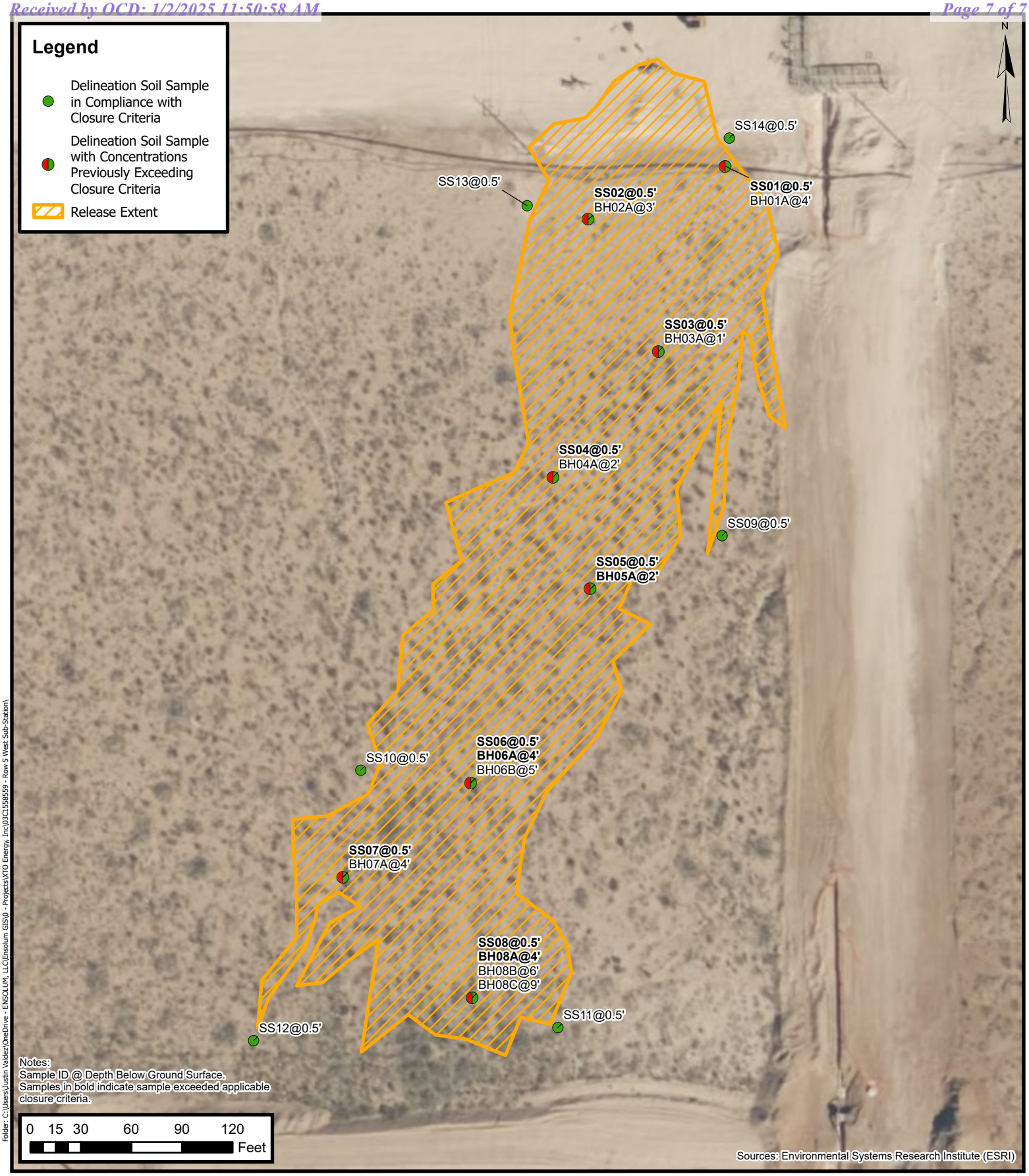
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

XTO Energy, Inc
Row 5 West Booster Station
Incident Number: nAPP2428259758
Unit K, Section 20, T25S, R30E
Eddy County, New Mexico

FIGURE 1



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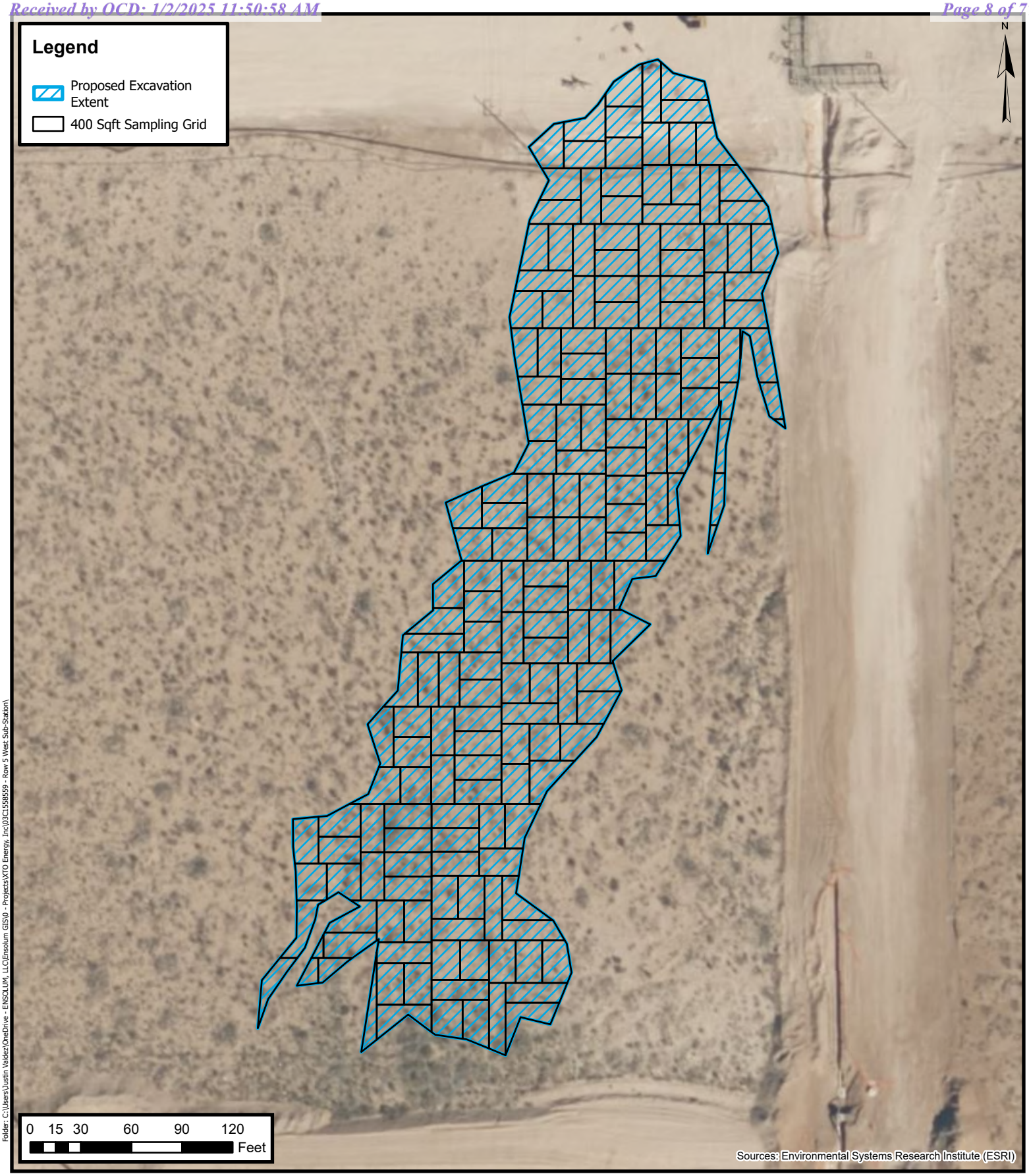
Delineation Soil Sample Locations

XTO Energy, Inc
Row 5 West Booster Station
Incident Number: nAPP2428259758
Unit K, Section 20, T25S, R30E
Eddy County, New Mexico

FIGURE 2



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Environmental, Engineering and Hydrogeologic Consultants

Proposed Excavation Map

XTO Energy, Inc
Row 5 West Booster Station
Incident Number: nAPP2428259758
Unit K, Section 20, T25S, R30E
Eddy County, New Mexico

FIGURE 3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
ROW 5 West Booster Station
XTO Energy, Inc
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
SS01	10/31/2024	0.5	<0.050	<0.300	<10.0	625	120	625	745	2,720
BH01A	11/21/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS02	10/31/2024	0.5	<0.050	<0.300	<10.0	155	25.7	155	181	4,880
BH02A	11/21/2024	3	<0.050	<0.300	<10.0	45.7	<10.0	45.7	45.7	224
SS03	10/31/2024	0.5	<0.050	<0.300	<10.0	1,420	289	**1,420**	1,709	3,480
BH03A	11/21/2024	1	<0.050	<0.300	<10.0	42.8	<10.0	42.8	42.8	208
SS04	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,600
BH04A	11/21/2024	2	<0.050	<0.300	<10.0	38.5	<10.0	38.5	38.5	96.0
SS05	10/31/2024	0.5	<0.050	<0.300	<10.0	122	16.1	122	138	2,040
BH05A	11/21/2024	2	<0.050	<0.300	<10.0	3,090	666	**3,090**	**3,756**	144
SS06	10/31/2024	0.5	<0.050	2.53	320	4,590	588	**4,910**	**5,498**	2,400
BH06A	11/21/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH06B	11/21/2024	5	<0.050	<0.300	<10.0	31.5	<10.0	31.5	31.5	112
SS07	10/31/2024	0.5	<0.050	<0.300	<10.0	226	55.1	226	281	2,200
BH07A	11/21/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
SS08	10/31/2024	0.5	<0.050	<0.300	<10.0	608	113	608	721	3,040
BH08A	11/21/2024	4	<0.050	<0.300	<10.0	151	25.8	151	177	64.0
BH08B	11/21/2024	6	<0.050	<0.300	<10.0	16.0	<10.0	16.0	16.0	48.0
BH08C	11/21/2024	9	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
ROW 5 West Booster Station
XTO Energy, Inc
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
SS09	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SS10	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS11	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS12	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS13	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS14	10/31/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

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

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

~~Grey~~ text indicates soil sample removed during excavation activities

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APPENDIX A

Referenced Well Records

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier:	Date:
MW01 C 4394	2/4/2020
Project Name:	**RP Number:**
PLU 423	2RP-3790
Logged By: FS	**Method:** SONIC
Lat/Long:	**Field Screening:** ~~CHLORIDES, PID.~~
Hole Diameter: 4"/6"	**Total Depth:** 110'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: No sampling, lithology remarks only

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					1			hydrovac excavated (refusal @ 1')
					2			2.5' SAND, dry, well graded, coarse-fine grand, light brwn-tan, no stain, no odor
D			N		3		SW-S	
					4			5' few silty sand pockets, reddish brwn, no plas, non cohesive
D			N		5			
					6			
					7		SP	6' SAND, dry, poorly graded, light brwn-brwn, fine-very fine
D			N		8			
					9			7.5' some mod. consol ss
D			N		10		SW-S	light brwn-brwn, sub rounded
					11			10' abundant ss
					12			12' ss gravel? absent
					13		SP	16' abundant ss gravel (mod consol)
					14			19' abundant - some
D			N		15			21.5' sandstone, light, abundant
					16			brwn-tan, dry, mod well consolidated
D			N		17		SW-S	
D			N		18			23' sandstone chunks absent
					19			
					20			
					21			
D			N		22			
					23			
					24			
D			N		25			

2.5-4
9-12

10-11' color change tan-off white

13' back to light brwn-brwn

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier:	Date:
MW01 C 4394	2/4/2020
Project Name:	**RP Number:**
PLU 423	~~2RP-2674~~ 2RP-3790
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: FS / Method: SONIC
Lat/Long:	Field Screening: ~~CHLORIDES, PID.~~ / Hole Diameter: 4"/6" / Total Depth: 110'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					26			27.5' SAND, dry, light brwn - tan, poorly graded, fine-very fine
D			N		27			
					28		SP	30' trace light ~~brwn - tan~~ grey - grey caliche pebbles (gravel), rounded
D			N		29			
					30			31' caliche pebbles absent
D			N		31			
					32			31.5' color change light brwn - reddish brwn
M			N		33			33-34' abundant ss chunks, mod consol
					34			35' ss chunks absent
					35			
M			N		36		SW-SM	36' some clay pockets, reddish brwn, few pebbles, rounded - subrounded, grey - light grey, few laminations w/ clay, caliche, dolomite?
					37			
					38			
M			N		39			
					40			
					41			42.5' clay laminations, trace, reddish brwn
M			N		42			
					43			
					44			44' color change, light brwn - tan, SILTY sand
M			N		45		SP-SM	44.5' some SILTY sand, predomin light brwn - tan, no plasticity, non cohesive, trace high plas clay nodules, reddish brwn
					46			
D			N		47			
					48			48.5' low plas clay band, orange (35-40 mm)
					49			49.5' faint yellow band, (15-20 mm)
D			N		50			

rig adding water

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier:	Date:
MW01 C 4394	2/4/2020
Project Name:	**RP Number:**
PLU 423	2RP-3790
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: FS / Method: sonic
Lat/Long: / Field Screening: ~~CHLORIDES, PID~~	Hole Diameter: 4"/6" / Total Depth: 110'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					51		SP	51.5' trace, high plas clay nodules
D			N		52			
					53			53-54' some silty ss, poorly consolidated
D			N		54			
					55			55.5' color change tan-grey band (30mm)
M			N		56			
					57	X		59.5' SILTY sand, light brwn-brwn, moist, no plas, non cohesive, no stain
M			N		58			
					59			
M			N		60		SM	62' more consolidated
					61			
					62			64' dark brwn color change, silty clay nodules
D			N		63		SM-S	
					64			66' pockets of silty clay brwn-green
M			N		65			
					66			68' low plas clay pockets some, few low plas clay laminations
M			N		67			
					68			71' SILTY sand, dry, no plas, non cohesive, light brwn-tan
M			N		69			
					70			74' trace caliche pebbles, light grey-grey
D			N		71		SM	
					72			
					73			
					74			
D			N		75			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier:	Date:
MW01 C 4394	2/4/2020
Project Name:	**RP Number:**
PLU 423	2RP-3790
Logged By: FS, BB	**Method:** sonic
Lat/Long:	**Field Screening:** ~~CHLORIDES, PID~~
Hole Diameter: 6"/4"	**Total Depth:** 110'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
						76	SM	76.5' trace low plas clay nodules, reddish brwn
D			N			77		
						78		82' CLAYSTONE, moist, brwn-greenish grey, low plasticity, cohesive, no stain, no odor mod consolidated
D			N			79		
						80		
D			N			81		85' SILTY sand, dry, light brwn - brwn, no plas, non cohesive, no stain, no odor
						82	CL-S	
M			N			83		
						84		
						85	SM	87' color change tan - off white
D			N			86		88' light brwn - brwn
						87	SM-S	
D			N			88		87' SILTSTONE, dry, w/ clay pockets, low plas
						89		
D			N			90		
						91		91' abundant clay pockets
						92		94.5' band yellow low plas clay
D			N			93		
						94	SM	
D			N			95	CH	end@95' 2/4/2020
						96		2/5/20
M			N			97		95'-101 CLAY, moist, brown - dark brown, high plasticity, cohesive, some tan clay laminations, no stain, no odor.
M			N			98		
D			N			99		98'-99' tan fine grain sandstone stringer.
M			N			100		

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: MW0 C 4394	Date: 2/5/2020
Project Name: PLU 423	RP Number: 2RP-3790
LITHOLOGIC / SOIL SAMPLING LOG Logged By: BP	Method: Sonic
Lat/Long: Field Screening: CHLORIDES, PID.	Hole Diameter: 6"/4" Total Depth: 110'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D			N		101		CH	
D			N		102		SP-S	101'- 105' SANDSTONE, tan - light brown, dry, moderately consolidated, calcareous cemented, poorly graded, no staining, no odor.
D			N		103			
D			N		104			
M			N		105			105'- 110' CLAY, moist, dark brown - brown, high plasticity, cohesive, trace tan sand laminations, no stain, no odor.
D			N		106		CH	
D			N		107			
D			N		108			107'- 109' tan - light brown well consolidated fine grain sandstone stringer.
M			N		109			
					110			
					111		TD@110	TD @ 110'
					112			
					113			
					114			
					115			
					116			
					117			
					118			
					119			
					120			
					121			
					122			
					123			
					124			
					125			

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APPENDIX B

Photographic Log

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Photographic Log
XTO Energy, Inc.
Row 5 West Booster Station
nAPP2428259758

Photograph: 1 Date: 10/08/2024
Description: Staining within release extent
View: Southeast

Photograph: 2 Date: 10/31/2024
Description: Staining within release extent
View: South

Photograph: 3 Date: 11/21/2024
Description: Delineation activities
View: Northeast

Photograph: 4 Date: 11/21/2024
Description: Delineation activities
View: Southwest

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APPENDIX C

Lithologic Soil Sampling Logs

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	Sample Name: SS01/BH01	Date: 11/21/2024
	Site Name: Row 5 West Sub Station	
	Incident Number: nAPP2428259758	
	Job Number: 03C1558559	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Hand auger
Coordinates: 32.114135, -103.907115	Hole Diameter: 2.5"	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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP/CL	(0-4') SAND, clay to sand sized grained, dark tan, poorly consolidated, no odor, poorly graded
D	4088	0.0	N	SS01	0.5			
D	4054	3.2	Y	BH01	1	1		
D	<179.2	2.8	N			2		
D	<179.2	1.9	N			3		
D	<179.2	0.8	N	BH01A	4	4		(@4') Hit Refusal

Total Depth @ 4 BGS

ENSOLUM

	Sample Name: SS02/BH02	Date: 11/21/2024
	Site Name: Row 5 West Sub Station	
	Incident Number: nAPP2428259758	
	Job Number: 03C1558559	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Hand auger
Coordinates: 32.114051, -103.907378	Hole Diameter: 2.5"	Total Depth: 3'

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP/CL	
D	10,064	0.0	N	SS02	0.5			(0-4') SAND, clay to sand sized grained, dark tan, poorly consolidated, no odor, poorly graded
D	856.8	2.3	Y	BH02	1	1		(+ faint odor)
D	856.8	7.5	Y			2		
D	<179.2	1.8	N	BH02A	3	3		(@3') Hit Refusal

Total Depth @ 3' BGS

ENSOLUM	Sample Name: SS03/BH03	Date: 11/21/2024
	Site Name: Row 5 West Sub Station	
	Incident Number: nAPP2428259758	
	Job Number: 03C1558559	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Hand auger
Coordinates: 32.113835, -103.907246	Hole Diameter: 2.5"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP/CL	(0-1') SAND, clay to sand sized grained, dark tan, poorly consolidated, faint odor, poorly graded
D	1034	7.3	Y	SS03	0.5			
D	274.4	0.7	N	BH03A	1	1		

Total Depth @ 1' BGS

ENSOLUM

	Sample Name: SS04/BH04	Date: 11/21/2024
	Site Name: Row 5 West Sub Station	
	Incident Number: nAPP2428259758	
	Job Number: 03C1558559	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Hand auger
Coordinates: 32.113631, -103.907450	Hole Diameter: 2.5"	Total Depth: 2'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP/CL	(0-2') SAND, clay to sand sized grained, dark tan, poorly consolidated, faint odor, poorly graded
D	6260	0.6	N	SS04	0.5			
D	4435.2	0.4	N	BH04	1	1		
D	162.4	0.4	N	BH04A	2	2		

Total Depths @ 2' BGS

ENSOLUM

	Sample Name: SS05/BH05	Date: 11/21/2024
	Site Name: Row 5 West Sub Station	
	Incident Number: nAPP2428259758	
	Job Number: 03C1558559	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Hand auger
Coordinates: 32.113448, -103.907381	Hole Diameter: 2.5"	Total Depth: 2'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP/CL	(0-2') SAND, clay to sand sized grained, dark tan, poorly consolidated, faint odor, poorly graded
D	2777	0.30	Y	SS05	0.5			
D	918.4	1.2	Y	BH05	1	1		
D	146	1.0	N	BH05A	2	2		

Total Depth @ 2' BGS

ENSOLUM

	Sample Name: SS06/BH06	Date: 11/21/2024
	Site Name: Row 5 West Sub Station	
	Incident Number: nAPP2428259758	
	Job Number: 03C1558559	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Hand auger
Coordinates: 32.113134, -103.907614	Hole Diameter: 2.5"	Total Depth: 5'

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP/CL	(0-5') SAND, clay to sand sized grained, dark tan, poorly consolidated, faint odor, poorly graded
D	4088	101.7	Y	SS06	0.5			
D	17136	2.5	Y	BH06	1	1		
D	638.4	2.5	Y			2		
D	<162.4	2.1	N			3		
D	<162.4	2.0	N	BH06A	4	4		
D		1.0		BH06B	5	5		

Total Depth @ 5 BGS

ENSOLUM

Sample Name: SS07/BH07	Date: 11/21/2024	
Site Name: Row 5 West Sub Station		
Incident Number: nAPP2428259758		
Job Number: 03C1558559		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Hand auger
Coordinates: 32.112982, -103.907860	Hole Diameter: 2.5"	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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP/CL	(0-4') SAND, clay to sand sized grained, dark tan, poorly consolidated, faint odor, poorly graded
D	3024	0.0	Y	SS07	0.5			
D	1170.4	0.7	N	BH07	1	1		
D	638.4	0.7	N			2		
D	515.2	0.7	N			3		
D	414.4	0.6	N	BH07A	4	4		

Total Depth @ 4' BGS

ENSOLUM

Sample Name: SS08/BH08	Date: 11/21/2024	
Site Name: Row 5 West Sub Station		
Incident Number: nAPP2428259758		
Job Number: 03C1558559		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JDB	Method: Hand auger
Coordinates: 32.112783, -103.907615	Hole Diameter: 2.5"	Total Depth: 9'

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP/CL	(0-9') SAND, clay to sand sized grained, dark tan, poorly consolidated, faint odor, poorly graded
D	3186	12.9	Y	SS08	0.5			
D	1982.4	5.4	Y	BH08	1	1		
D	996.8	5.1	Y			2		
D	576.8	3.8	N			3		
D	162.4	3.0	N	BH0A	4	4		
D	<162.4	6.5	N			5		
D	<162.4	3.7	N	BH08B	6	6		
D	<162.4	6.5	N			7		
D	<162.4	3.4	N			8		
D	<162.4	3.8	N	BH08C	9	9		(@ 9') Hit Refusal

Total Depth @ 9'

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

November 26, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 5 WEST SUB - STATION

Enclosed are the results of analyses for samples received by the laboratory on 11/22/24 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 01 A 4' (H247177-01)

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	11/25/2024	ND	2.03	101	2.00	4.53	
Toluene*	<0.050	0.050	11/25/2024	ND	1.92	96.1	2.00	2.85	
Ethylbenzene*	<0.050	0.050	11/25/2024	ND	2.03	101	2.00	5.00	
Total Xylenes*	<0.150	0.150	11/25/2024	ND	6.17	103	6.00	5.46	
Total BTEX	<0.300	0.300	11/25/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *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	11/26/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2024	ND	220	110	200	1.70	
DRO >C10-C28*	<10.0	10.0	11/25/2024	ND	203	101	200	1.40	
EXT DRO >C28-C36	<10.0	10.0	11/25/2024	ND					

Surrogate: 1-Chlorooctane *65.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *62.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 02 A 3' (H247177-02)

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	11/25/2024	ND	2.03	101	2.00	4.53	
Toluene*	<0.050	0.050	11/25/2024	ND	1.92	96.1	2.00	2.85	
Ethylbenzene*	<0.050	0.050	11/25/2024	ND	2.03	101	2.00	5.00	
Total Xylenes*	<0.150	0.150	11/25/2024	ND	6.17	103	6.00	5.46	
Total BTEX	<0.300	0.300	11/25/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.9 %* *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	**224**	16.0	11/26/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2024	ND	220	110	200	1.70	
DRO >C10-C28*	**45.7**	10.0	11/25/2024	ND	203	101	200	1.40	
EXT DRO >C28-C36	<10.0	10.0	11/25/2024	ND					

Surrogate: 1-Chlorooctane *67.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *65.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 03 A 1' (H247177-03)

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	11/25/2024	ND	2.03	101	2.00	4.53	
Toluene*	<0.050	0.050	11/25/2024	ND	1.92	96.1	2.00	2.85	
Ethylbenzene*	<0.050	0.050	11/25/2024	ND	2.03	101	2.00	5.00	
Total Xylenes*	<0.150	0.150	11/25/2024	ND	6.17	103	6.00	5.46	
Total BTEX	<0.300	0.300	11/25/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**208**	16.0	11/26/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2024	ND	220	110	200	1.70	
DRO >C10-C28*	**42.8**	10.0	11/25/2024	ND	203	101	200	1.40	
EXT DRO >C28-C36	<10.0	10.0	11/25/2024	ND					

Surrogate: 1-Chlorooctane *59.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *56.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 04 A 2' (H247177-04)

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	11/25/2024	ND	2.03	101	2.00	4.53	
Toluene*	<0.050	0.050	11/25/2024	ND	1.92	96.1	2.00	2.85	
Ethylbenzene*	<0.050	0.050	11/25/2024	ND	2.03	101	2.00	5.00	
Total Xylenes*	<0.150	0.150	11/25/2024	ND	6.17	103	6.00	5.46	
Total BTEX	<0.300	0.300	11/25/2024	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	**96.0**	16.0	11/26/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2024	ND	220	110	200	1.70	
DRO >C10-C28*	**38.5**	10.0	11/25/2024	ND	203	101	200	1.40	
EXT DRO >C28-C36	<10.0	10.0	11/25/2024	ND					

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

Surrogate: 1-Chlorooctadecane *91.9 %* *49.1-148*

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 05 A 2' (H247177-05)

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	11/25/2024	ND	2.03	101	2.00	4.53	
Toluene*	<0.050	0.050	11/25/2024	ND	1.92	96.1	2.00	2.85	
Ethylbenzene*	<0.050	0.050	11/25/2024	ND	2.03	101	2.00	5.00	
Total Xylenes*	<0.150	0.150	11/25/2024	ND	6.17	103	6.00	5.46	
Total BTEX	<0.300	0.300	11/25/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *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	**144**	16.0	11/26/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2024	ND	220	110	200	1.70	
DRO >C10-C28*	**3090**	10.0	11/25/2024	ND	203	101	200	1.40	
EXT DRO >C28-C36	**666**	10.0	11/25/2024	ND					

Surrogate: 1-Chlorooctane *94.6 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 06 A 4' (H247177-06)

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	11/25/2024	ND	2.03	101	2.00	4.53	
Toluene*	<0.050	0.050	11/25/2024	ND	1.92	96.1	2.00	2.85	
Ethylbenzene*	<0.050	0.050	11/25/2024	ND	2.03	101	2.00	5.00	
Total Xylenes*	<0.150	0.150	11/25/2024	ND	6.17	103	6.00	5.46	
Total BTEX	<0.300	0.300	11/25/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.3 %* *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	**48.0**	16.0	11/26/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2024	ND	220	110	200	1.70	
DRO >C10-C28*	<10.0	10.0	11/25/2024	ND	203	101	200	1.40	
EXT DRO >C28-C36	<10.0	10.0	11/25/2024	ND					

Surrogate: 1-Chlorooctane *98.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *98.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 07 A 4' (H247177-07)

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	11/25/2024	ND	2.03	101	2.00	4.53	
Toluene*	<0.050	0.050	11/25/2024	ND	1.92	96.1	2.00	2.85	
Ethylbenzene*	<0.050	0.050	11/25/2024	ND	2.03	101	2.00	5.00	
Total Xylenes*	<0.150	0.150	11/25/2024	ND	6.17	103	6.00	5.46	
Total BTEX	<0.300	0.300	11/25/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *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	**256**	16.0	11/26/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2024	ND	220	110	200	1.70	
DRO >C10-C28*	<10.0	10.0	11/25/2024	ND	203	101	200	1.40	
EXT DRO >C28-C36	<10.0	10.0	11/25/2024	ND					

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

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 08 A 4' (H247177-08)

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	11/25/2024	ND	2.03	101	2.00	4.53	
Toluene*	<0.050	0.050	11/25/2024	ND	1.92	96.1	2.00	2.85	
Ethylbenzene*	<0.050	0.050	11/25/2024	ND	2.03	101	2.00	5.00	
Total Xylenes*	<0.150	0.150	11/25/2024	ND	6.17	103	6.00	5.46	
Total BTEX	<0.300	0.300	11/25/2024	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	**64.0**	16.0	11/26/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2024	ND	220	110	200	1.70	
DRO >C10-C28*	**151**	10.0	11/25/2024	ND	203	101	200	1.40	
EXT DRO >C28-C36	**25.8**	10.0	11/25/2024	ND					

Surrogate: 1-Chlorooctane *99.0 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 1

Company Name: Ensolum, LLC		**BILL TO**	
Project Manager: Ben Belill		P.O. #:	
Address: 3122 National Parks Hwy		Company: XTO Energy Inc	
City: Carlsbad	State: NM Zip: 88220	Attn: Colton Brown	
Phone #: 989 854 0852	Fax #:	Address: 3104 E Green St	
Project #: 03C1558559	Project Owner: XTO	City: Carlsbad	
Project Name: ROW 5 West Substation		State: NM Zip: 88220	
Project Location: 32.1142303, -103.9071374		Phone #:	
Sampler Name: Joshua Boxley		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides	TPH	BTEX
H247177																		
1	BH01A	4	G	1			X					X		11.21.24	1030	X	X	X
2	BH02A	3													1150			
3	BH03A	~~2~~ 1													~~1445~~ 1535			
4	BH04A	2													1445			
5	BH05A	2													1430			
6	BH06A	4													1400			
7	BH07A	4													1330			
8	BH08A	4	G	1			X					X		11.21.24	1230	X	X	X

JVS

Relinquished By:	Date: 11-22-24 Time: 1300	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: BBelill @ensolum.com, TMorrissey@ensolum.com, KThomason@ensolum.com
			REMARKS: Incident: ~~fAP~~ JOS nAPP2428259756 Cost Center: 1068171001

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.3 Corrected Temp. °C 4.7	Sample Condition Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) AP	Turnaround Time: Standard ☐ Rush ☒ 48hr AP ~~FAP~~ Thermometer ID #113 ~~#140~~ Correction Factor ~~0.5°C~~ -0.6	Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

November 04, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 5 WEST SUB - STATION

Enclosed are the results of analyses for samples received by the laboratory on 11/01/24 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/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 01 0.5' (H246677-01)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *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	**2720**	16.0	11/02/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	**625**	10.0	11/01/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	**120**	10.0	11/01/2024	ND					

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

Surrogate: 1-Chlorooctadecane *99.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 02 0.5' (H246677-02)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.4 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4880**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	**155**	10.0	11/01/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	**25.7**	10.0	11/01/2024	ND					

Surrogate: 1-Chlorooctane *95.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 03 0.5' (H246677-03)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.0 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3480**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	**1420**	10.0	11/01/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	**289**	10.0	11/01/2024	ND					

Surrogate: 1-Chlorooctane *102 %* *48.2-134*

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

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 04 0.5' (H246677-04)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3600**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	<10.0	10.0	11/01/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	11/01/2024	ND					

Surrogate: 1-Chlorooctane *92.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *80.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 05 0.5' (H246677-05)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.6 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2040**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	**122**	10.0	11/01/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	**16.1**	10.0	11/01/2024	ND					

Surrogate: 1-Chlorooctane *102 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 06 0.5' (H246677-06)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	**0.203**	0.050	11/02/2024	ND	2.07	104	2.00	5.61	GC-NC1
Total Xylenes*	**2.33**	0.150	11/02/2024	ND	6.18	103	6.00	6.01	GC-NC1
Total BTEX	**2.53**	0.300	11/02/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *233 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2400**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**320**	10.0	11/01/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	**4590**	10.0	11/01/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	**588**	10.0	11/01/2024	ND					

Surrogate: 1-Chlorooctane *153 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *139 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 07 0.5' (H246677-07)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2200**	16.0	11/03/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	**226**	10.0	11/01/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	**55.1**	10.0	11/01/2024	ND					

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 08 0.5' (H246677-08)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	11/03/2024	ND	416	104	400	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	**608**	10.0	11/02/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	**113**	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane *110 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 09 0.5' (H246677-09)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

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

Surrogate: 1-Chlorooctadecane *90.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 10 0.5' (H246677-10)

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	11/02/2024	ND	2.12	106	2.00	4.62	
Toluene*	<0.050	0.050	11/02/2024	ND	2.06	103	2.00	5.05	
Ethylbenzene*	<0.050	0.050	11/02/2024	ND	2.07	104	2.00	5.61	
Total Xylenes*	<0.150	0.150	11/02/2024	ND	6.18	103	6.00	6.01	
Total BTEX	<0.300	0.300	11/02/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane *105 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 11 0.5' (H246677-11)

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	11/01/2024	ND	2.23	112	2.00	1.89	
Toluene*	<0.050	0.050	11/01/2024	ND	2.42	121	2.00	4.54	
Ethylbenzene*	<0.050	0.050	11/01/2024	ND	2.51	126	2.00	6.61	
Total Xylenes*	<0.150	0.150	11/01/2024	ND	7.52	125	6.00	7.29	
Total BTEX	<0.300	0.300	11/01/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

Surrogate: 1-Chlorooctane *99.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *84.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 12 0.5' (H246677-12)

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	11/01/2024	ND	2.23	112	2.00	1.89	
Toluene*	<0.050	0.050	11/01/2024	ND	2.42	121	2.00	4.54	
Ethylbenzene*	<0.050	0.050	11/01/2024	ND	2.51	126	2.00	6.61	
Total Xylenes*	<0.150	0.150	11/01/2024	ND	7.52	125	6.00	7.29	
Total BTEX	<0.300	0.300	11/01/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

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

Surrogate: 1-Chlorooctadecane *83.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 13 0.5' (H246677-13)

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	11/01/2024	ND	2.23	112	2.00	1.89	
Toluene*	<0.050	0.050	11/01/2024	ND	2.42	121	2.00	4.54	
Ethylbenzene*	<0.050	0.050	11/01/2024	ND	2.51	126	2.00	6.61	
Total Xylenes*	<0.150	0.150	11/01/2024	ND	7.52	125	6.00	7.29	
Total BTEX	<0.300	0.300	11/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2024	ND	198	99.1	200	3.45	
DRO >C10-C28*	<10.0	10.0	11/02/2024	ND	200	100	200	6.95	
EXT DRO >C28-C36	<10.0	10.0	11/02/2024	ND					

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/01/2024	Sampling Date:	10/31/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: SS 14 0.5' (H246677-14)

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	11/01/2024	ND	2.23	112	2.00	1.89	
Toluene*	<0.050	0.050	11/01/2024	ND	2.42	121	2.00	4.54	
Ethylbenzene*	<0.050	0.050	11/01/2024	ND	2.51	126	2.00	6.61	
Total Xylenes*	<0.150	0.150	11/01/2024	ND	7.52	125	6.00	7.29	
Total BTEX	<0.300	0.300	11/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.8 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/03/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2024	ND	199	99.7	200	2.80	
DRO >C10-C28*	<10.0	10.0	11/04/2024	ND	197	98.6	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	11/04/2024	ND					

Surrogate: 1-Chlorooctane *99.1 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Ben Belille	**P.O. #:**
Address: 3122 National Parks Hwy	**Company:** XTO Energy Inc.
City: Carlsbad **State:** NM **Zip:** 88220	**Attn:** Colton Brown
Phone #: 989-854-0852 **Fax #:**	**Address:** 3104 E. Greene St.
Project #: 03C1558559 **Project Owner:** XTO	**City:** Carlsbad
Project Name: Row 5 West Sub-Station	**State:** NM **Zip:** 88220
Project Location: 32.1142303, -103.9071374	**Phone #:**
Sampler Name: Azad Vojdani	**Fax #:**

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	CHLORIDE
H246077																		
1	SS01	0.5'	G	1			✓					✓		10/31/24	1027	✓	✓	✓
2	SS02		G	1			✓					✓			1029	✓	✓	✓
3	SS03		G	1			✓					✓			1038	✓	✓	✓
4	SS04		G	1			✓					✓			1049	✓	✓	✓
5	SS05		G	1			✓					✓			1053	✓	✓	✓
6	SS06		G	1			✓					✓			1112	✓	✓	✓
7	SS07		G	1			✓					✓			1114	✓	✓	✓
8	SS08		G	1			✓					✓			1115	✓	✓	✓
9	SS09		G	1			✓					✓			1145	✓	✓	✓
10	SS10		G	1			✓					✓			1129	✓	✓	✓

Relinquished By:	**Date:** 11/1/24	**Received By:**	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
	Time: 1300		All Results are emailed. Please provide Email address:
Relinquished By:	**Date:**	**Received By:**	AVojdani@ensolum.com TMorrissey@ensolum.com, bbelille@ensolum.com
	Time:		**REMARKS:**
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.7 Corrected Temp. °C 5.1	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) TO.

Cost center: 1081711001 Incident #: NAPP2428259758

Turnaround Time: Standard ☐ Rush ☒ 24 TAT

Thermometer ID #113 Correction Factor -0.6°C

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

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

FORM-006 R 3.2 10/07/21

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Ensolum, LLC
Project Manager:	Ben Belille
Address:	3122 National Parks Hwy
City:	Carlsbad **State:** NM **Zip:** 88220
Phone #:	989-854-0852 **Fax #:**
Project #:	03C1558559 **Project Owner:** XTO
Project Name:	Row 5 West Sub-Station
Project Location:	32.1142303, -103.9071374
Sampler Name:	Azad Vojdani

BILL TO

P.O. #:	
Company:	XTO Energy Inc.
Attn:	Colton Brown
Address:	3104 E. Greene St.
City:	Carlsbad
State:	NM **Zip:** 88220
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	CHLORIDE
H246677																		
11	SS11	0.5	G	1			✓					✓		10/31/24	1121	✓	✓	✓
12	SS12	↓	G	1			✓					✓		↓	1124	✓	✓	✓
13	SS13		G	1			✓					✓			1132	✓	✓	✓
14	SS14	↓	G	1			✓					✓		↓	1139	✓	✓	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	**Date:** 11/1/24 **Time:** 1200	**Received By:**	
Relinquished By:	**Date:** **Time:**	**Received By:**	

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

All Results are emailed. Please provide Email address:
AVojdani@ensolum.com TMorrissey@ensolum.com, bbelille@ensolum.com

REMARKS:
Cost center: 1081711001 Incident #: NAPP2428259758

Delivered By: (Circle One)	Observed Temp. °C 5.7	**Sample Condition** Cool: ☑ Yes ☐ No	Intact: ☐ Yes ☐ No	**CHECKED BY: (Initials)**
Sampler - UPS - Bus - Other:	Corrected Temp. °C 5.1			

Turnaround Time: Standard ☐ Rush ☒ 24 TAT @ 12:11/1/24
Thermometer ID #140 Correction Factor -0.5°C

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

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

FORM-006 R 3.2 10/07/21

CARDINAL Laboratories

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

November 26, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 5 WEST SUB - STATION

Enclosed are the results of analyses for samples received by the laboratory on 11/22/24 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 06 B 5' (H247176-01)

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	11/23/2024	ND	2.08	104	2.00	7.12	
Toluene*	<0.050	0.050	11/23/2024	ND	2.01	101	2.00	3.67	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	3.84	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.24	104	6.00	3.26	
Total BTEX	<0.300	0.300	11/23/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	11/25/2024	ND	448	112	400	3.64	

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	11/23/2024	ND	205	103	200	3.25	
DRO >C10-C28*	**31.5**	10.0	11/23/2024	ND	192	96.0	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	11/23/2024	ND					

Surrogate: 1-Chlorooctane *110 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 1

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Ben Belill	P.O. #:
Address: 3122 National Parks Hwy	Company: XTO Energy Inc
City: Carlsbad State: NM Zip: 88220	Attn: Colton Brown
Phone #: 989 854 0852 Fax #:	Address: 3104 E Green St
Project #: 03C1558559 Project Owner: XTO	City: Carlsbad
Project Name: ROW 5 West Sub-station	State: NM Zip: 88220
Project Location: 32.1142303, -103.9071374	Phone #:
Sampler Name: Joshua Boxley	Fax #:

FOR LAB USE ONLY					MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST														
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH	BTEX													
H247176																														
1	BH06B	5	G	1			X					X		11.21.24	1415	X	X	X												

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 11.22.24	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1200		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	BBelill @ensolum.com, TMorrissey@ensolum.com, KThomason@ensolum.com
	Time:		REMARKS: Incident: nAPP2428259758
Delivered By: (Circle One)	Observed Temp. °C 5.3	Sample Condition Cool Intact	Cost Center: 1081711001
Sampler - UPS - Bus - Other:	Corrected Temp. °C 4.7	☑ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (Initials) AD

Turnaround Time: 48hr Standard ☐ Rush ☑ AD
Thermometer ID #113 #140
Correction Factor -0.5°C -0.6

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

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

November 26, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 5 WEST SUB - STATION

Enclosed are the results of analyses for samples received by the laboratory on 11/22/24 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 08 B 6' (H247175-01)

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	11/23/2024	ND	2.08	104	2.00	7.12	
Toluene*	<0.050	0.050	11/23/2024	ND	2.01	101	2.00	3.67	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	3.84	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.24	104	6.00	3.26	
Total BTEX	<0.300	0.300	11/23/2024	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	11/25/2024	ND	448	112	400	3.64	

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	11/23/2024	ND	205	103	200	3.25	
DRO >C10-C28*	**16.0**	10.0	11/23/2024	ND	192	96.0	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	11/23/2024	ND					

Surrogate: 1-Chlorooctane *113 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 1

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Ben Belill	P.O. #:
Address: 3122 National Parks Hwy	Company: XTO Energy Inc
City: Carlsbad State: NM Zip: 88220	Attn: Colton Brown
Phone #: ~~(9~~ 989 854 ~~0855~~ Fax #:	Address: 3104 E Green St
Project #: 03C1558559 Project Owner: XTO	City: Carlsbad
Project Name: ROW 5 West Sub-station	State: NM Zip: 88220
Project Location: 32.1142303, -103.9071374	Phone #:
Sampler Name: Joshua Boxley	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides	TPH	BTEX
H247175 1	BH08B	6	G	1			X					X		11.21.24	1245	X	X	X

JDS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 11.22.24 Time: 1204	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: Ben Belill @ensolum.com, TMorrissey@ensolum.com, KThomason@ensolum.com
			REMARKS: Incident: nAPP2428259758 Cost Center: 1081711001

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.3 Corrected Temp. °C 4.7	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) AT	Turnaround Time: Standard ☐ Rush ☒ 48 hr AT Thermometer ID #113 #140 Correction Factor -0.5°C -0.6

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

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

November 26, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: ROW 5 WEST SUB - STATION

Enclosed are the results of analyses for samples received by the laboratory on 11/22/24 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.

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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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
BEN BELILL
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	11/22/2024	Sampling Date:	11/21/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	ROW 5 WEST SUB - STATION	Sampling Condition:	Cool & Intact
Project Number:	03C1558559	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.1142303-103.9071374		

Sample ID: BH 08 C 9' (H247174-01)

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	11/23/2024	ND	2.08	104	2.00	7.12	
Toluene*	<0.050	0.050	11/23/2024	ND	2.01	101	2.00	3.67	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	3.84	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.24	104	6.00	3.26	
Total BTEX	<0.300	0.300	11/23/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/25/2024	ND	448	112	400	3.64	

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	11/23/2024	ND	205	103	200	3.25	
DRO >C10-C28*	<10.0	10.0	11/23/2024	ND	192	96.0	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	11/23/2024	ND					

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

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Notes and Definitions

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RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
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	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 1

Company Name: Ensolum, LLC		**BILL TO**	
Project Manager: Ben Belill		P.O. #:	
Address: 3122 National Parks Hwy		Company: XTO Energy Inc	
City: Carlsbad	State: NM Zip: 88220	Attn: Colton Brown	
Phone #: 989 854 0852	Fax #:	Address: 3104 E Green St	
Project #: 03C1558559	Project Owner: XTO	City: Carlsbad	
Project Name: ROW 5 West Sub-station		State: NM Zip: 88220	
Project Location: 32.1142303, -103.9071374		Phone #:	
Sampler Name: Joshua Boxley		Fax #:	

FOR LAB USE ONLY					MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST												
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH	BTEX										
H247174 1	BH08C	9	G	1			X					X		11.21.24	1258	X	X	X									TDS	

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Relinquished By:	Date: 11.22.24	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1304		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	BBelill @ensolum.com, TMorrissey@ensolum.com, KThomason@ensolum.com
	Time:		REMARKS: Incident: NAPP2428259758
			Cost Center: 1081711001

Delivered By: (Circle One)	Observed Temp. °C 5.3	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Rush ☒
Sampler - UPS - Bus - Other:	Corrected Temp. °C 4.7	☑ Yes ☐ Yes ☐ No ☐ No	RD	48hr Thermometer ID #113 Correction Factor -0.5°C -0.6

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

FORM-006 R 3.2 10/07/21

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

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 416412

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 416412
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2428259758**
Incident Name	**NAPP2428259758 ROW 5 WEST BOOSTER STATION @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Row 5 West Booster Station
Date Release Discovered	10/08/2024
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: Equipment Failure | Pump | Produced Water | Released: 187 BBL | Recovered: 0 BBL | Lost: 187 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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 416412
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 01/02/2025

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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 416412
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between ½ and 1 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission		Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Have the lateral and vertical extents of contamination been fully delineated		Yes
Was this release entirely contained within a lined containment area		No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride	(EPA 300.0 or SM4500 Cl B)	4880
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	5498
GRO+DRO	(EPA SW-846 Method 8015M)	4910
BTEX	(EPA SW-846 Method 8021B or 8260B)	2.5
Benzene	(EPA SW-846 Method 8021B or 8260B)	0.1
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence		02/27/2025
On what date will (or did) the final sampling or liner inspection occur		04/28/2025
On what date will (or was) the remediation complete(d)		04/28/2025
What is the estimated surface area (in square feet) that will be reclaimed		72456
What is the estimated volume (in cubic yards) that will be reclaimed		10734
What is the estimated surface area (in square feet) that will be remediated		72456
What is the estimated volume (in cubic yards) that will be remediated		10734
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.		

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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 416412
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	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.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 01/02/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 416412
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 416412
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**402949**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**11/22/2024**
What was the (estimated) number of samples that were to be gathered	**20**
What was the sampling surface area in square feet	**4000**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 416412
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	The Remediation Plan is Conditionally Approved. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The variance request to collect floor samples every 400 ft2 is approved. All off pad areas must meet reclamation standards set forth in the OCD Spill Rule. The work will need to occur in 90 days after the work plan has been reviewed	1/6/2025