



September 25, 2024

New Mexico Energy Minerals and Natural Resources Department
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Deferral Request
Remuda 500 Battery
Incident Number NAPP2418053192
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Deferral Request* to document assessment, delineation, excavation, and soil sampling activities at the Remuda 500 Battery (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water. Based on field observations and soil sample laboratory analytical results, XTO is submitting this *Deferral Request*, describing Site assessment, delineation, and excavation activities that have occurred and requesting deferral of final remediation for Incident Number NAPP2418053192 until the Site is reconstructed, and/or the well pad is abandoned.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 25, Township 23 South, Range 29 East, in Eddy County, New Mexico (32.270479°, -103.937524°) and is associated with oil and gas exploration and production operations on state land managed by the New Mexico State Land Office (NMSLO).

On June 27, 2024, internal corrosion on a pipeline resulted in the release of approximately 37 barrels (bbls) of produced water onto the surface of the well pad and around active production equipment and process piping with no released fluids recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via Notification of Release (NOR) on June 28, 2024 and submitted an Initial C-141 Application (C-141) on July 1, 2024. The release was assigned Incident Number NAPP2418053192.

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 and potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on a soil boring drilled for determination of regional groundwater depth. On January 5, 2021, a soil boring permitted by New Mexico Office of the State Engineer (OSE) well C-04494, located approximately 0.30 miles northwest of the Site, was drilled utilizing a truck-mounted hollow-stem auger

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rig. The boring was drilled to a total depth of 105 feet bgs. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole was left open for over 72 hours to allow for the potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater at that location is greater than 105 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record and Log is included in Appendix A. All wells used to evaluate depth to groundwater are presented on Figure 1.

The closest continuously flowing or significant watercourse to the Site is a seasonal dry wash, located approximately 128 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Potential Site receptors are identified on Figure 1.

Based on the closest significant watercourse, the following Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

CULTURAL PROPERTIES PROTECTION

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

DELINEATION AND EXCAVATION ACTIVITIES

On July 15, 2024 through August 23, 2024, Ensolum personnel were onsite to oversee delineation and excavation activities. Five potholes (PH01 through PH05) were advanced via backhoe or hydrovac to assess the lateral and vertical definition of the release. Potholes PH01 through PH05 were advanced to maximum depths ranging from 6 feet to 9 feet bgs. Discrete delineation soil samples were collected from each pothole at depths ranging from 0.5 feet to 9 feet bgs. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. Field screening results and observations from each pothole were logged on lithologic/soil sampling logs, which are included in Appendix B. All delineation soil sample locations are depicted on Figure 2. Photographic documentation was conducted and photographs are included in a Photographic Log in Appendix C.

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

Soil was excavated to the maximum extent possible (MEP) with hydrovac, backhoe, and transport vehicles. XTO safety policy restricts soil disturbing activities within a 2-foot radius of any active production equipment, pipelines, and or utilities. Following the removal of impacted soil, 5-point

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composite confirmation soil samples were collected every 200 square feet from the floor of the excavation (FS01 through FS12) at depths ranging from 3 feet to 9 feet bgs and from the sidewalls of the excavation (SW01 through SW06) at depths ranging from ground surface to 9 feet bgs. Sidewall soil sample SW07 was collected from ground surface to 4 feet bgs and a second sidewall in the same area was collected from 4 feet bgs to 9 feet bgs to confirm the top 4 feet of the excavation was compliant with the Closure Criteria. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The soil samples were collected, handled, and analyzed following the same procedures as described above. The final excavation extent and floor and sidewall soil sample locations are depicted on Figure 3.

Laboratory analytical results for delineation soil samples collected from PH01, located within the release extent, at depths of 0.5 feet and 1 foot bgs indicated that chloride concentrations exceeded the Closure Criteria. The terminal delineation soil sample of PH01B collected at 6 feet bgs indicated all COC concentrations were compliant with the Closure Criteria, successfully defining the vertical extent of the release. Laboratory analytical results for delineation soil samples PH02 through PH05B, located north, south, east, and west of the excavation extent, collected at depths ranging from 0.5 feet bgs to 9 feet bgs indicated all COCs were compliant with the Closure Criteria, successfully defining the lateral extent of the release.

Laboratory analytical results for confirmation soil samples SW01 and SW03 indicated chloride concentrations exceeded Site Closure Criteria. On September 6, 2024, Ensolum personnel returned to the Site to oversee additional excavation and sampling activities in response to elevated chloride levels in the area of SW03. Two confirmation soil samples were collected from the new sidewall: SW07 from ground surface to 4 feet bgs and another sample representing the sidewall at depths of 4 feet to 9 feet bgs. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix D.

The final excavation extent measured approximately 2,220 square feet. A total of approximately 330 cubic yards of impacted soil was removed during excavation activities and was properly disposed of at the R360 Landfill Facility in Hobbs, New Mexico.

Due to proximity to active production equipment requiring access for operations, the excavation was backfilled on September 13, 2024, with locally procured material and recontoured to match the surrounding pad conditions.

DEFERRAL REQUEST

Due to active production equipment and process piping present in the area, depicted in photos 6 through 8, the remaining impacted soil along the sidewall represented by confirmation soil sample SW01 was not removed. XTO is requesting a deferral of final remediation of residual impacts. The estimated extent of remaining impacted soil measures approximately 2,777 square feet, and a total of approximately 617 cubic yards of impacted soil remains in place, assuming a depth of 6 feet bgs based on laboratory analytical results from delineation soil sample PH01B. The release extent has been laterally delineated by delineation soil samples PH02 through PH05 and excavation sidewall soil samples SW02 and SW04 through SW07. The proposed deferral area and all samples used to define the deferral area are depicted on Figure 4.

XTO does not believe deferment will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was determined to be greater than 110 feet, and the entirety of the release remained on pad. Based on the presence of active production equipment and process piping within the release area and the complete lateral and vertical definition of impacted soil remaining in place, XTO requests deferral of final remediation for Incident Number NAPP2418053192 until final abandonment of the well pad or major construction, whichever comes first.

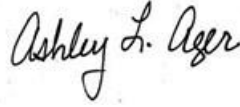
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If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely,
Ensolum, LLC



David A. McInnis
Project Geologist



Ashley L. Ager, MS, PG
Principal

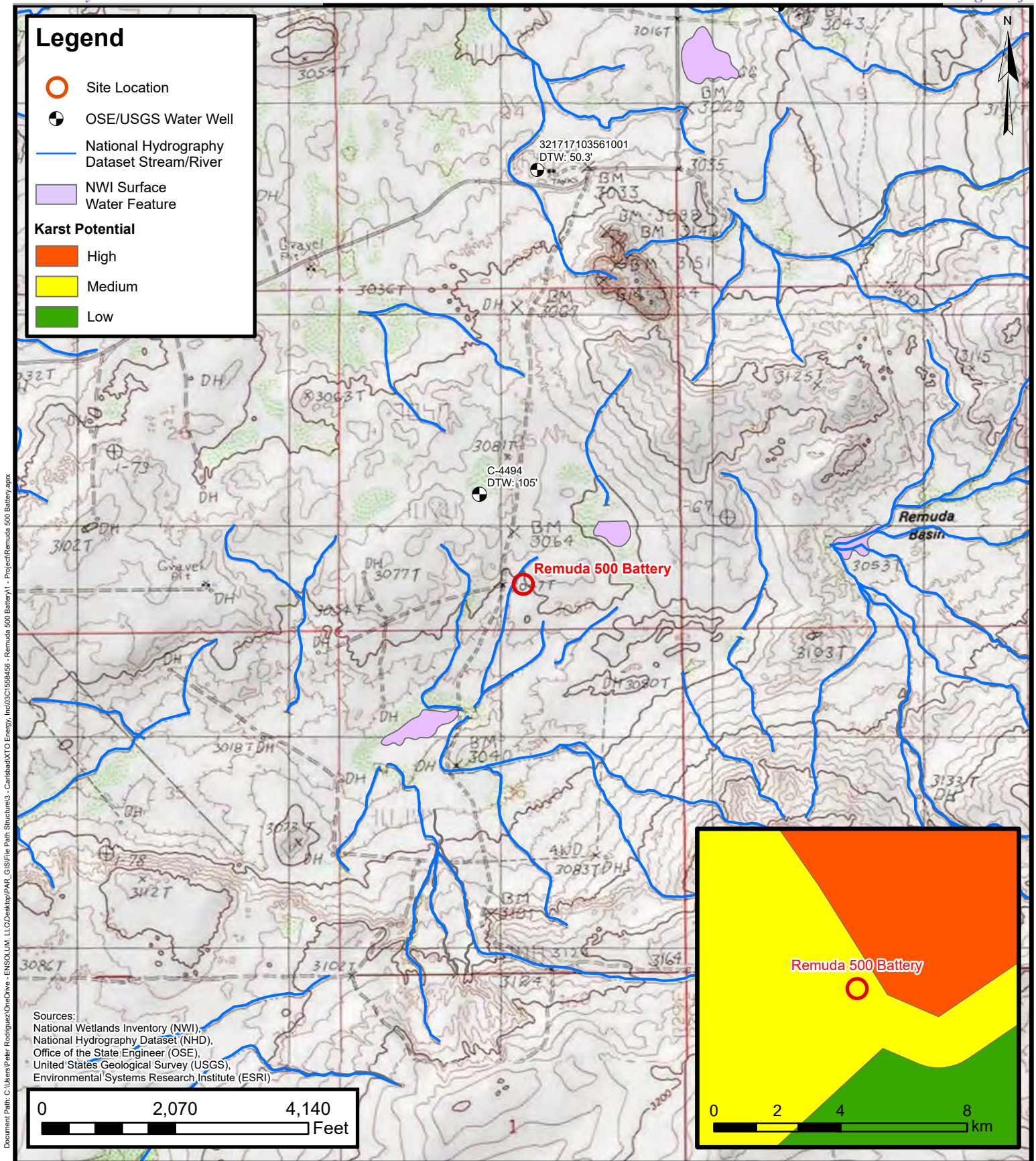
cc: Colton Brown, XTO
Kaylan Dirkx, XTO
BLM

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Figure 4	Deferral Area Map
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Lithologic / Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES



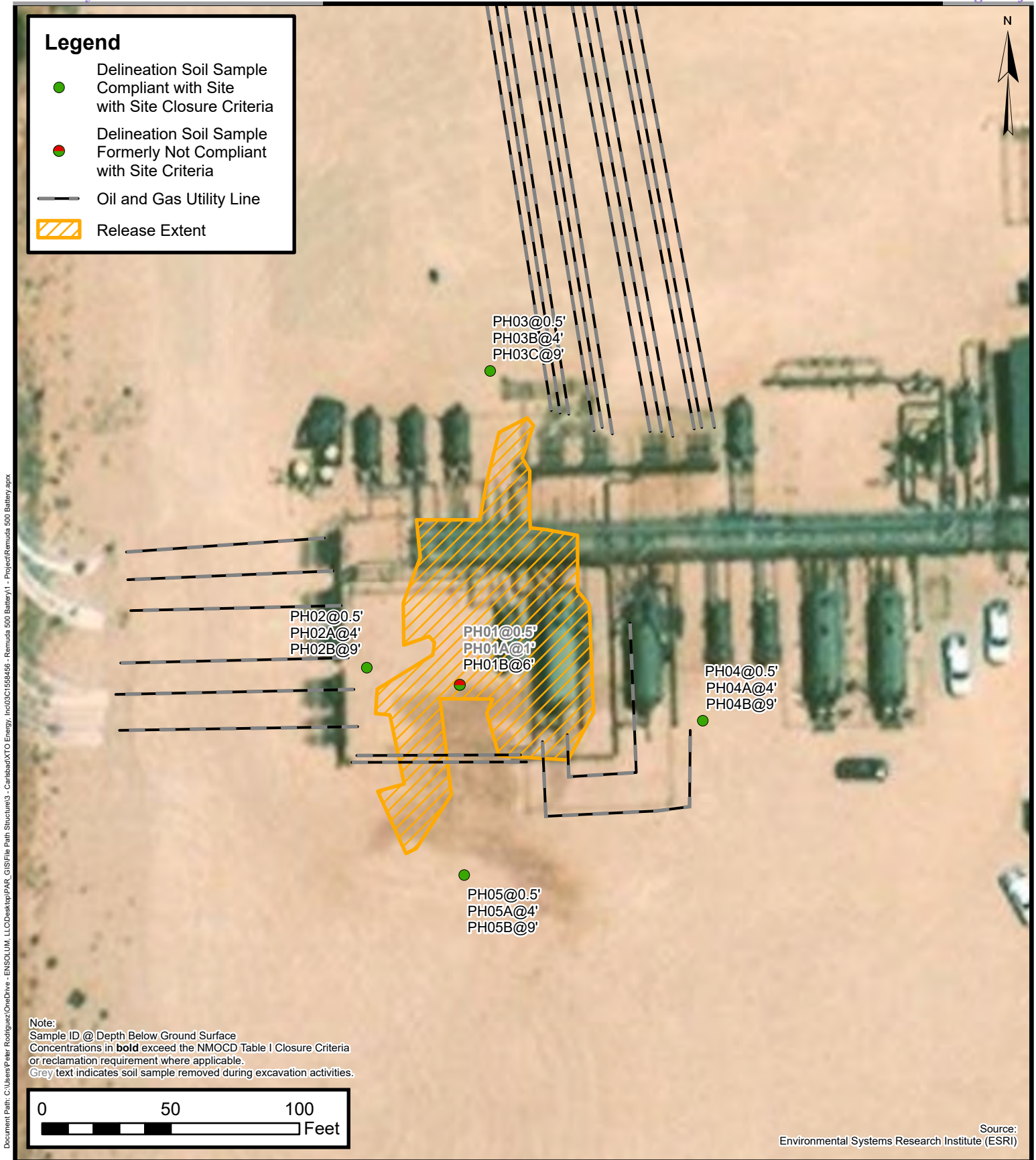
Site Receptor Map

XTO Energy, Inc
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 Incident Number: NAPP2418053192
 Unit O , Sec 25, T23S, R29E
 Eddy County, New Mexico

FIGURE

1

ENSOLUM
 Environmental, Engineering and
 Hydrogeologic Consultants



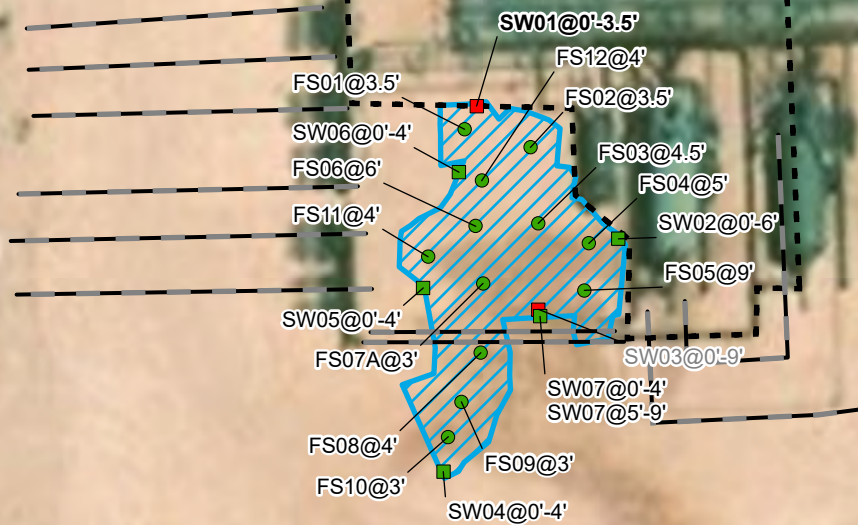
Delineation Soil Sample Locations

XTO Energy, Inc
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 Unit O , Sec 25, T23S, R29E
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FIGURE
2

Legend

- Confirmation Soil Sample
Compliant with Site
with Site Closure Criteria
- Confirmation Sidewall
Sample Compliant with
Site Closure Criteria
- Confirmation Sidewall
Sample Not Compliant
with Site Closure Criteria
- Oil and Gas Utility Line
- - - Active Surface Pipelines /
Production Equipment
- ▨ Excavation Extent



Note:
 Sample ID @ Depth Below Ground Surface
 Concentrations in **bold** exceed the NMOC Table I Closure Criteria
 or reclamation requirement where applicable.
 Grey text indicates soil sample removed during excavation activities.

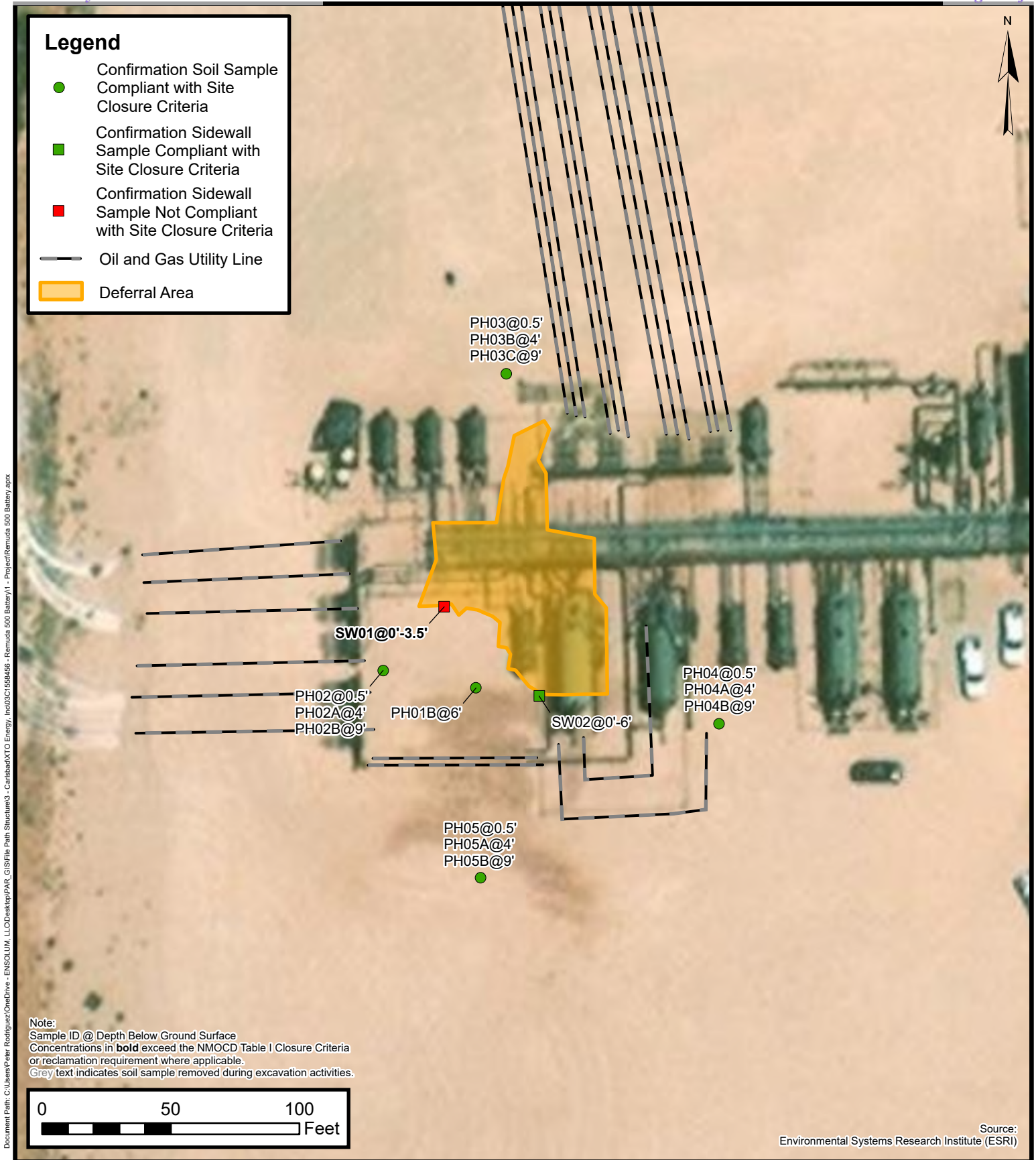
0 50 100
 Feet

Source:
 Environmental Systems Research Institute (ESRI)

**Excavation Soil Sample Locations**

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FIGURE
3



Deferral Area

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Unit O , Sec 25, T23S, R29E
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FIGURE
4



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Remuda 500 Battery
 XTO Energy, Inc
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Delineation Soil Samples										
PH01	07/15/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	7,000
PH01A	07/15/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,700
PH01B	07/15/2024	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
PH02	07/30/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
PH02A	07/30/2024	4	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
PH02B	07/30/2024	9	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
PH03	07/30/2024	0.5	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
PH03B	07/30/2024	4	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
PH03C	07/30/2024	9	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
PH04	07/30/2024	0.5	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
PH04A	07/30/2024	4	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
PH04B	07/30/2024	9	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
PH05	07/30/2024	0.5	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288
PH05A	07/30/2024	4	<0.50	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
PH05B	07/30/2024	9	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
Confirmation Soil Samples										
FS01	07/16/2024	3.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
FS02	07/16/2024	3.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
FS03	07/17/2024	4.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
FS04	07/16/2024	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
FS05	07/16/2024	9	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS06	07/17/2024	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS07	08/23/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
FS08	08/23/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
FS09	08/23/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
FS10	08/23/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
FS11	09/06/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS12	09/06/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Remuda 500 Battery
 XTO Energy, Inc
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
SW01	07/16/2024	0 - 3.5	<0.050	<0.300	<10.0	30.5	<48.0	30.5	30.5	896
SW02	07/16/2024	0 - 6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
SW03	08/23/2024	0 - 9	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,230
SW04	08/23/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288
SW05	09/06/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
SW06	09/06/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
SW07	09/06/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SW07	09/06/2024	4 - 9	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0

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





APPENDIX A


Referenced Well Records

<div><div><div>WSP USA</div><div>508 West Stevens Street Carlsbad, New Mexico 88220</div></div></div>		BH or PH Name:		Date:				
		BH01 (C-04494)		11/18/2020, 12/02/20, 01/05/2021				
		Site Name:		Remuda North 25 Observation Well				
		RP or Incident Numbe						
LTE Job Number:		TE012919039						
LITHOLOGIC / SOIL SAMPLING LOG				Logged By BB, LAD, FS		Method: Hollow Stem Auger, sonic		
Lat/Long:		Field Screening:		Hole Diameter:		Total Depth:		
				6.25", 4.25"		105'		
Comments: Lithology remarks only. No field screenings: Dry hole								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D			N			1	SP-SC	0-1' : SAND, dry, brown, poorly graded, fine grain, Clay (10% clay), some roots, no stain, no odor 1-4' : SAND, dry, reddish-light brown, poorly graded, very fine - fine grain, some rounded caliche pebbles, no stain, no odor 4-9' : CALICHE, dry, light brown-tan, poorly consolidated, sub-rounded caliche pebbles and gravel, very silty, gradational 9-14' : Abundent sub-round caliche gravel 14-19' : Some sub-angular caliche gravel and pebbles 19-24' : Abundant sub-angular caliche gravel and pebbles, moderately consolidated
D			N			2	CCHE	
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		
D			N			25		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name:		Date:	
								BH01 (C-04494)		11/18/2020, 12/02/20, 01/05/2021	
								Site Name:		Remuda North 25 Observation Well	
								RP or Incident Number:			
LITHOLOGIC / SOIL SAMPLING LOG								LTE Job Number:		TE012919039	
Lat/Long:				Field Screening:				Logged By BB, LAD, FS		Method: Hollow Stem Auger, sonic	
Hole Diameter:				Total Depth:				6.25", 4.25"		105'	
Comments: Lithology remarks only. No field screenings: Dry hole											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
D			N			26	CL	24-39' : MUDSTONE, dry, reddish-brown, low plasticity, well consolidated, cohesive, trace caliche sub-angular pebbles, no tain, no odor, sharp transition 34-39' : Sub-angular calcium carbonate gravel with dissolution features (1-3mm), tan-light brown At 39' : Begin air rotary (4.25") 39-42' : DOLOMETIC LIMESTONE, tan-light brown, dry, well consolidated, with dissolution features (1-3mm), sharp, no stain, no odor, light to moderate reaction with HCl 42-45' : Some light gray dolomite with trace dissolution features (>1mm) At 48' : Stop due to air rotary refusal (11/18/20)			
						27					
						28					
						29					
						30					
						31					
						32					
						33					
						34					
						35					
						36		48-56' : Advance borehole with new air rotary bit (12/02/20), DOLOMITE, white, well consolidated, dark gray-black banding, no stain , no odor			
						37					
						38					
						39					
						40					
						41					
						42					
						43					
						44					
						45					
						46		Refusal on 11/18/20 Restart borehole on 12/02/20			
						47					
						48					
						49					
						50					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name:		Date:				
		BH01 (C-04494)		11/18/2020, 12/02/2020, 1/5/2021				
		Site Name:		Remuda North 25 Observation Well				
		RP or Incident Number:						
		LTE Job Number: TE012919039						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long:		Field Screening:		Hole Diameter:				
				6.25", 4.25"				
				Total Depth:				
				105'				
Comments: Lithologic log only, no field screenings								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D			N			51	DOL	48-56' : Advanced borehole with new air rotary bit (12/02/20), DOLOMITE, white, well consolidated, dark gray- banding, no stain no odor
						52		
						53		
						54		
						55		
						56		
						57		
						58		
						59		
						60		
D			N			61	CH-S	At 56' : Restarted borehole on 1/5/2021 with sonic rig 56-65' : DOLOMITE, dry, light gray-gray, well consolidated, some calcium crystalline veins (<1mm), some dissolution features (2mm) with fine calcite crystalline, trace orange oxidation staining within dissolution features, no stain, no odor 62' : Brown-pale yellow coarse crystalline dolomitic limestone stringer (2cm) 63-65' : Abundant calcite crystalline veins (<1mm), pale green-gray, poorly consolidated
						62		
						63		
						64		
						65		
						66		
						67		
						68		
						69		
						70		
			N			71	GYP	65-69' : MUDSTONE, moist, reddish brown, poorly consolidated, high plasticity, cohesive, abundant coarse crystalline gypsum, few pale green-gray mottling, no stain, no odor 69-81' : GYPSUM with Anhydrite, dry, greenish gray, some pale yellow, well consolidated, fine crystalline, 20% anhydrite, no stain, no odor
						72		
						73		
						74		
						75		


 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name:		Date:				
		BH01 (C-04494)		11/18/2020, 12/02/2020, 1/5/2021				
		Site Name:		Remuda North 25 Observation Well				
		RP or Incident Number:						
		LTE Job Number: TE012919039						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long:		Field Screening:		Hole Diameter:				
				6.25", 4.25"				
				Total Depth:				
				105'				
Comments: Lithologic log only, no field screenings								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D			N			76	GYP	69-81' : GYPSUM with Anhydrite, dry, greenish gray, some pale yellow, well consolidated, fine crystalline, 20% anhydrite, no stain, no odor
						77		
						78		
						79		
						80		
						81	CH-S	90-98' : Some fine grain brown sand At 97' : dark gray-gray gypsum stringer (4cm)
						82		
						83		
						84		
						85		
						86		
						87		
						88		
						89		
						90		
						91		
						92		
						93		
94								
95								
96								
97								
D			N			98	GYP	
						99		
D			N			100	ML-S	


 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH01 (C-04494)		11/18/2020, 12/02/2020, 1/5/2021	
					Site Name:		Remuda North 25 Observation Well	
					RP or Incident Number:			
					LTE Job Number: TE012919039			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, LAD, FS		Method: Hollow Stem Auger, sonic	
Lat/Long:			Field Screening:		Hole Diameter:		Total Depth:	
					6.25", 4.25"		105'	
Comments: Lithologic log only, no field screenings								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D			N			101	ML-S	99.5-105' : Sandy SILTSTONE, moist, brown, some gray-dark gray, poorly consolidated, 20% very fine grain sand, no stain, no odor
						102		
						103		
						104		
						105		
						106		TD @ 105' bgs (1/5/2021)
						107		
						108		
						109		
						110		
						111		
						112		
						113		
						114		
						115		
						116		
						117		
						118		
						119		
						120		
						121		
						122		
						123		
						124		
						125		





APPENDIX B


Lithologic Soil Sampling Logs

 ENSOLUM		Sample Name: PH01		Date: 7-15-24				
		Site Name: Remuda 500 Battery						
		Incident Number: nAPP2418053192						
		Job Number: 03C1558456						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.270310, -103.937525			Logged By: Connor Whitman		Method: Backhoe			
			Hole Diameter: 2'		Total Depth: 6'			
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
M	8,495	20.8	Y	PH01	0.5	0	CCHE	CALICHE brown/tan, with silt moist. Staining, no HC odor.
M	11,575	0.0	Y	PH01A	1	1		
M	9,917	0.0	Y		2	2		
M	10,712	0.0	Y		3	3		
M	2,240	0.0	Y		4	4		
D	5,712	0.0	N		5	5	SP	SAND, brown, very fine, with silt. No stain or HC odor
D	<168	0.0	N	PH01B	6	6		
Total Depth @ 6 feet bgs.								

 ENSOLUM		Sample Name: PH02		Date: 7-30-24				
		Site Name: Remuda 500 Battery						
		Incident Number: nAPP2418053192						
		Job Number: 03C1558456						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.270420, -103.937733			Logged By: Connor Whitman		Method: Hydro Vac			
			Hole Diameter: 1'		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		
D	168	0.0	N	PH02	0.5		CCHE	CALICHE, tan, with cobble sized rocks, and silt. No stain, no odor.
D	168	0.0	N		1	1		
D	168	0.0	N		2	2		
D	168	0.0	N		3	3		
D	168	0.0	N	PH02A	4	4		
D	168	0.0	N		6	6	SP	SAND, brown, very fine, with silt. No stain, No odor.
D	168	0.0	N		8	8		
D	168	0.0	N	PH02B	9	9		
Total Depth @ 9 feet bgs.								

 ENSOLUM		Sample Name: PH03		Date: 7-30-24				
		Site Name: Remuda 500 Battery						
		Incident Number: nAPP2418053192						
		Job Number: 03C1558456						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.270685, -103.937556			Logged By: Connor Whitman		Method: Hydro Vac			
			Hole Diameter: 1'		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		
D	235	0.0	N	PH03	0.5		CCHE	CALICHE, tan, with cobble sized rocks, and silt. No stain, no odor.
D	168	0.0	N		1	1		
D	168	0.0	N		2	2		
D	168	0.0	N		3	3		
D	168	0.0	N	PH03A	4	4		
D	168	0.0	N		6	6	SP	SAND, brown, very fine, with silt. No stain, No odor.
D	168	0.0	N		8	8		
D	168	0.0	N	PH03B	9	9		
Total Depth @ 9 feet bgs.								

								Sample Name: PH04		Date: 7-30-24	
								Site Name: Remuda 500 Battery			
								Incident Number: nAPP2418053192			
								Job Number: 03C1558456			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Connor Whitman		Method: Backhoe	
Coordinates: 32.270374, -103.937238								Hole Diameter: 2'		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			
D	<168	0.0	N	PH04	0.5	0	CCHE	CALICHE, tan, with cobble sized rocks, and silt. No stain, no odor.			
D	<168	0.0	N		1	1					
D	<168	0.0	N		2	2					
D	<168	0.0	N		3	3					
D	<168	0.0	N	PH04A	4	4	SP	SAND, brown, very fine, with silt. No stain, No odor.			
D	<168	0.0	N		6	6					
D	<168	0.0	N	PH04B	9	9					
Total Depth @ 9 feet bgs.											

 ENSOLUM		Sample Name: PH05		Date: 7-30-24				
		Site Name: Remuda 500 Battery						
		Incident Number: nAPP2418053192						
		Job Number: 03C1558456						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.270236, -103.937583			Logged By: Connor Whitman		Method: Backhoe			
			Hole Diameter: 2'		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		
D	<168	0.0	N	PH05	0.5		CCHE	CALICHE, tan, with cobble sized rocks, and silt. No stain, no odor.
D	<168	0.0	N		1	1		
D	<168	0.0	N		2	2		
D	<168	0.0	N		3	3		
D	<168	0.0	N	PH05A	4	4	SP	SAND brown, very fine, with low plasticity clay and silt. No stain or odor.
						5		
D	<168	0.0	N		6	6	SP	SAND, brown, very fine, with silt. No stain, No odor.
						7		
D	<168	0.0	N		8	8		
D	<168	0.0	N	PH05B	9	9		
Total Depth @ 9 feet bgs.								



APPENDIX C

Photographic Log



Photographic Log
XTO Energy, Inc
Remuda 500 Battery
NAPP2418053192



Photograph: 1 Date: 6/27/2024
Description: Soil staining in release footprint
View: North



Photograph: 2 Date: 6/27/2024
Description: Soil staining in release footprint
View: North



Photograph: 3 Date: 7/30/2024
Description: Excavation activities
View: Southeast



Photograph: 4 Date: 7/30/2024
Description: Excavation activities
View: Southeast



Photographic Log
XTO Energy, Inc
Remuda 500 Battery
NAPP2418053192



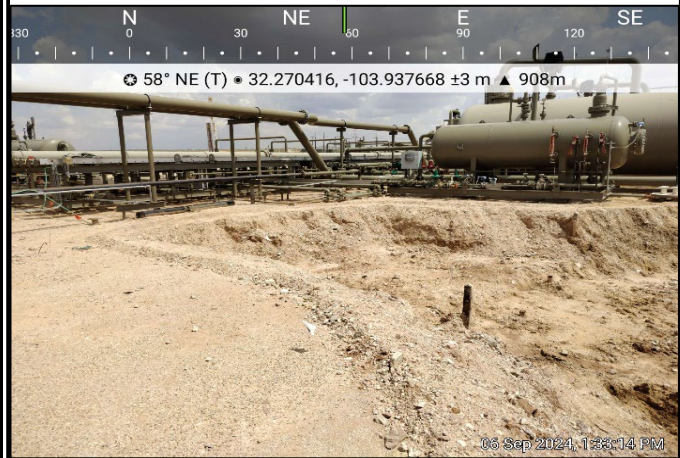
Photograph: 5 Date: 8/23/2024
Description: Excavation activities
View: East



Photograph: 6 Date: 8/23/2024
Description: Excavation activities
View: Northeast



Photograph: 7 Date: 9/6/2024
Description: Excavation activities
View: Southeast



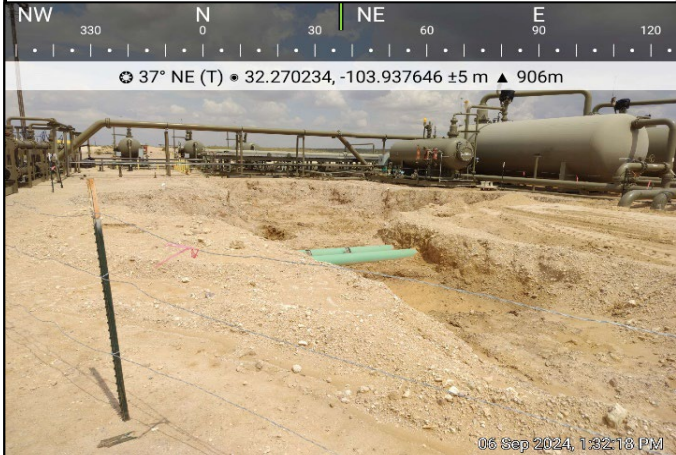
Photograph: 8 Date: 9/6/2024
Description: Excavation activities
View: Northeast



Photographic Log
 XTO Energy, Inc
 Remuda 500 Battery
 NAPP2418053192



Photograph: 9 Date: 9/6/2024
 Description: Final excavation extent
 View: East



Photograph: 10 Date: 9/6/2024
 Description: Final excavation extent
 View: Northeast



Photograph: 11 Date: 9/13/2024
 Description: Backfill extent
 View: Southeast



Photograph: 12 Date: 9/13/2024
 Description: Backfill extent
 View: Northwest



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



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

July 23, 2024

DAVID MCINNIS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: REMUDA 500 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/18/24 13:50.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/18/2024
Reported: 07/23/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/16/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 01 3'6" (H244310-01)

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	07/19/2024	ND	1.95	97.3	2.00	2.33	
Toluene*	<0.050	0.050	07/19/2024	ND	1.91	95.3	2.00	1.13	
Ethylbenzene*	<0.050	0.050	07/19/2024	ND	2.00	100	2.00	0.996	
Total Xylenes*	<0.150	0.150	07/19/2024	ND	5.90	98.3	6.00	0.866	
Total BTEX	<0.300	0.300	07/19/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2024	ND	197	98.6	200	7.97	
DRO >C10-C28*	<10.0	10.0	07/19/2024	ND	214	107	200	11.6	
EXT DRO >C28-C36	<10.0	10.0	07/19/2024	ND					

Surrogate: 1-Chlorooctane 88.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/18/2024
Reported: 07/23/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/16/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 02 3'6" (H244310-02)

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	07/19/2024	ND	1.95	97.3	2.00	2.33		
Toluene*	<0.050	0.050	07/19/2024	ND	1.91	95.3	2.00	1.13		
Ethylbenzene*	<0.050	0.050	07/19/2024	ND	2.00	100	2.00	0.996		
Total Xylenes*	<0.150	0.150	07/19/2024	ND	5.90	98.3	6.00	0.866		
Total BTEX	<0.300	0.300	07/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2024	ND	197	98.6	200	7.97	
DRO >C10-C28*	<10.0	10.0	07/19/2024	ND	214	107	200	11.6	
EXT DRO >C28-C36	<10.0	10.0	07/19/2024	ND					

Surrogate: 1-Chlorooctane 84.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/18/2024
Reported: 07/23/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/16/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SW 01 0-3'6" (H244310-03)

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	07/19/2024	ND	1.95	97.3	2.00	2.33		
Toluene*	<0.050	0.050	07/19/2024	ND	1.91	95.3	2.00	1.13		
Ethylbenzene*	<0.050	0.050	07/19/2024	ND	2.00	100	2.00	0.996		
Total Xylenes*	<0.150	0.150	07/19/2024	ND	5.90	98.3	6.00	0.866		
Total BTEX	<0.300	0.300	07/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	896	16.0	07/22/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2024	ND	197	98.6	200	7.97	
DRO >C10-C28*	30.5	10.0	07/19/2024	ND	214	107	200	11.6	
EXT DRO >C28-C36	<10.0	10.0	07/19/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/18/2024
Reported: 07/23/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/16/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 04 5' (H244310-04)

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	07/19/2024	ND	1.95	97.3	2.00	2.33	
Toluene*	<0.050	0.050	07/19/2024	ND	1.91	95.3	2.00	1.13	
Ethylbenzene*	<0.050	0.050	07/19/2024	ND	2.00	100	2.00	0.996	
Total Xylenes*	<0.150	0.150	07/19/2024	ND	5.90	98.3	6.00	0.866	
Total BTEX	<0.300	0.300	07/19/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2024	ND	197	98.6	200	7.97	
DRO >C10-C28*	<10.0	10.0	07/19/2024	ND	214	107	200	11.6	
EXT DRO >C28-C36	<10.0	10.0	07/19/2024	ND					

Surrogate: 1-Chlorooctane 86.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/18/2024
Reported: 07/23/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/16/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SW 02 0-6' (H244310-05)

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	07/19/2024	ND	1.95	97.3	2.00	2.33		
Toluene*	<0.050	0.050	07/19/2024	ND	1.91	95.3	2.00	1.13		
Ethylbenzene*	<0.050	0.050	07/19/2024	ND	2.00	100	2.00	0.996		
Total Xylenes*	<0.150	0.150	07/19/2024	ND	5.90	98.3	6.00	0.866		
Total BTEX	<0.300	0.300	07/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 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	368	16.0	07/22/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2024	ND	197	98.6	200	7.97	
DRO >C10-C28*	<10.0	10.0	07/19/2024	ND	214	107	200	11.6	
EXT DRO >C28-C36	<10.0	10.0	07/19/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/18/2024
Reported: 07/23/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/16/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 05 9' (H244310-06)

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	07/19/2024	ND	1.95	97.3	2.00	2.33		
Toluene*	<0.050	0.050	07/19/2024	ND	1.91	95.3	2.00	1.13		
Ethylbenzene*	<0.050	0.050	07/19/2024	ND	2.00	100	2.00	0.996		
Total Xylenes*	<0.150	0.150	07/19/2024	ND	5.90	98.3	6.00	0.866		
Total BTEX	<0.300	0.300	07/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 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	128	16.0	07/22/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2024	ND	202	101	200	6.64	
DRO >C10-C28*	<10.0	10.0	07/19/2024	ND	193	96.3	200	9.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2024	ND					

Surrogate: 1-Chlorooctane 81.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/18/2024
Reported: 07/23/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/17/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 03 4'6" (H244310-07)

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	07/19/2024	ND	1.95	97.3	2.00	2.33		
Toluene*	<0.050	0.050	07/19/2024	ND	1.91	95.3	2.00	1.13		
Ethylbenzene*	<0.050	0.050	07/19/2024	ND	2.00	100	2.00	0.996		
Total Xylenes*	<0.150	0.150	07/19/2024	ND	5.90	98.3	6.00	0.866		
Total BTEX	<0.300	0.300	07/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 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	240	16.0	07/22/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2024	ND	202	101	200	6.64	
DRO >C10-C28*	<10.0	10.0	07/19/2024	ND	193	96.3	200	9.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2024	ND					

Surrogate: 1-Chlorooctane 93.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/18/2024
Reported: 07/23/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/17/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 06 6' (H244310-08)

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	07/19/2024	ND	1.95	97.3	2.00	2.33		
Toluene*	<0.050	0.050	07/19/2024	ND	1.91	95.3	2.00	1.13		
Ethylbenzene*	<0.050	0.050	07/19/2024	ND	2.00	100	2.00	0.996		
Total Xylenes*	<0.150	0.150	07/19/2024	ND	5.90	98.3	6.00	0.866		
Total BTEX	<0.300	0.300	07/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/22/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/19/2024	ND	202	101	200	6.64	
DRO >C10-C28*	<10.0	10.0	07/19/2024	ND	193	96.3	200	9.45	
EXT DRO >C28-C36	<10.0	10.0	07/19/2024	ND					

Surrogate: 1-Chlorooctane 86.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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

Celey D. Keene, Lab Director/Quality Manager



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

July 22, 2024

DAVID MCINNIS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: REMUDA 500 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/16/24 13:25.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/16/2024
Reported: 07/22/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO

Sampling Date: 07/15/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 01 .5' (H244232-01)

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	07/17/2024	ND	1.97	98.5	2.00	4.05	
Toluene*	<0.050	0.050	07/17/2024	ND	2.14	107	2.00	3.45	
Ethylbenzene*	<0.050	0.050	07/17/2024	ND	2.20	110	2.00	3.02	
Total Xylenes*	<0.150	0.150	07/17/2024	ND	6.83	114	6.00	2.91	
Total BTEX	<0.300	0.300	07/17/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7000	16.0	07/17/2024	ND	432	108	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	07/17/2024	ND	206	103	200	5.27	
DRO >C10-C28*	<10.0	10.0	07/17/2024	ND	179	89.4	200	7.62	
EXT DRO >C28-C36	<10.0	10.0	07/17/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 142 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/16/2024
Reported: 07/22/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO

Sampling Date: 07/15/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 01A 1' (H244232-02)

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	07/17/2024	ND	1.97	98.5	2.00	4.05		
Toluene*	<0.050	0.050	07/17/2024	ND	2.14	107	2.00	3.45		
Ethylbenzene*	<0.050	0.050	07/17/2024	ND	2.20	110	2.00	3.02		
Total Xylenes*	<0.150	0.150	07/17/2024	ND	6.83	114	6.00	2.91		
Total BTEX	<0.300	0.300	07/17/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5700	16.0	07/17/2024	ND	432	108	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	07/17/2024	ND	206	103	200	5.27	
DRO >C10-C28*	<10.0	10.0	07/17/2024	ND	179	89.4	200	7.62	
EXT DRO >C28-C36	<10.0	10.0	07/17/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 07/16/2024
Reported: 07/22/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO

Sampling Date: 07/15/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 01B 6' (H244232-03)

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	07/17/2024	ND	1.97	98.5	2.00	4.05		
Toluene*	<0.050	0.050	07/17/2024	ND	2.14	107	2.00	3.45		
Ethylbenzene*	<0.050	0.050	07/17/2024	ND	2.20	110	2.00	3.02		
Total Xylenes*	<0.150	0.150	07/17/2024	ND	6.83	114	6.00	2.91		
Total BTEX	<0.300	0.300	07/17/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/17/2024	ND	432	108	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	07/17/2024	ND	206	103	200	5.27	
DRO >C10-C28*	<10.0	10.0	07/17/2024	ND	179	89.4	200	7.62	
EXT DRO >C28-C36	<10.0	10.0	07/17/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

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

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*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]



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

August 07, 2024

DAVID MCINNIS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: REMUDA 500 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/01/24 14:10.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 02 0.5 (H244608-01)

BTEx 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTEX	<0.300	0.300	08/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 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	256	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 68.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 02A 4 (H244608-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/02/2024	ND	1.82	91.2	2.00	8.24		
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35		
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35		
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35		
Total BTEx	<0.300	0.300	08/02/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 87.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 02B 9 (H244608-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTEX	<0.300	0.300	08/02/2024	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	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 62.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 70.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 03 0.5 (H244608-04)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTEX	<0.300	0.300	08/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 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	160	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 74.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 03B 4 (H244608-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/02/2024	ND	1.82	91.2	2.00	8.24		
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35		
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35		
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35		
Total BTEX	<0.300	0.300	08/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 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	112	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 77.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 03C 9 (H244608-06)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTX	<0.300	0.300	08/02/2024	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	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 80.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 04 0.5 (H244608-07)

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	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTEX	<0.300	0.300	08/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 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	160	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 78.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 04A 4 (H244608-08)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTX	<0.300	0.300	08/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 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	144	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 75.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.1 % 49.1-148

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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 04B 9 (H244608-09)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTX	<0.300	0.300	08/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 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	32.0	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 64.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 05 0.5 (H244608-10)

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	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTEX	<0.300	0.300	08/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 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	288	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 68.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 05A 4 (H244608-11)

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	08/02/2024	ND	1.82	91.2	2.00	8.24		
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35		
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35		
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35		
Total BTEx	<0.300	0.300	08/02/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 75.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/01/2024
Reported: 08/07/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 07/30/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: PH 05B 9 (H244608-12)

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	08/02/2024	ND	1.82	91.2	2.00	8.24	
Toluene*	<0.050	0.050	08/02/2024	ND	1.78	89.0	2.00	8.35	
Ethylbenzene*	<0.050	0.050	08/02/2024	ND	1.89	94.3	2.00	8.35	
Total Xylenes*	<0.150	0.150	08/02/2024	ND	5.54	92.4	6.00	8.35	
Total BTEX	<0.300	0.300	08/02/2024	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	96.0	16.0	08/06/2024	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	08/02/2024	ND	212	106	200	2.64	
DRO >C10-C28*	<10.0	10.0	08/02/2024	ND	232	116	200	8.76	
EXT DRO >C28-C36	<10.0	10.0	08/02/2024	ND					

Surrogate: 1-Chlorooctane 81.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 2

[illegible]



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC

Project Manager: David Mcinnis

Address: 3122 National Parks Hwy

City: Carlsbad

Phone #: 337 257-8307

Project #: 03C1558456

Project Name: Remuda 500 Battery

Project Location:

Sampler Name: Connor Whitman

FOR LAB USE ONLY

P.O. #:

Company: XTO Energy Inc.

Attn: Amy Ruth

Address: 3104 E. Green St.

City: Carlsbad

State: NM Zip: 88220

Phone #:

Fax #:

MATRIX

PRESERV

SAMPLING

Lab I.D.

Sample I.D.

Sample Depth
(feet)

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

BTEX

TPH

CHLORIDE

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Relinquished By:

Date:

Received By:

Verbal Result:

Yes

No

Add'l Phone #:

All Results are emailed. Please provide Email address:

bbell@ensolum.com, TMorrissey@ensolum.com, dmclinnis@ensolum.com

Relinquished By:

Date:

Received By:

REMARKS:

Cost Center: 1067601001

Incident ID: nAPP2418053192

Please send copy of signed COC to: cwhitman@ensolum.com

Delivered By: (Circle One)

Observed Temp. °C

Sample Condition

CHECKED BY:

Turnaround Time:

Standard

Bacteria (only)

Cool Intact

Observed Temp. °C

Corrected Temp. °C

Sampler - UPS - Bus - Other:

Corrected Temp. °C

Cool Intact

Checked By:

Thermometer ID #449

Rush

Cool Intact

Observed Temp. °C

Corrected Temp. °C

FORM-006 R 3.2 11/07/17

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



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

August 28, 2024

DAVID MCINNIS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: REMUDA 500 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/27/24 13:47.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/27/2024
Reported: 08/28/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 07 3' (H245190-01)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204	
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911	
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14	
Total BTX	<0.300	0.300	08/27/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 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	176	16.0	08/28/2024	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	08/27/2024	ND	218	109	200	2.16	
DRO >C10-C28*	<10.0	10.0	08/27/2024	ND	209	104	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/27/2024	ND					

Surrogate: 1-Chlorooctane 70.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/27/2024
Reported: 08/28/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 08 4' (H245190-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEx	<0.300	0.300	08/27/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	08/28/2024	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	08/27/2024	ND	218	109	200	2.16	
DRO >C10-C28*	<10.0	10.0	08/27/2024	ND	209	104	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/27/2024	ND					

Surrogate: 1-Chlorooctane 75.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/27/2024
Reported: 08/28/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 09 3' (H245190-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204	
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911	
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14	
Total BTEX	<0.300	0.300	08/27/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 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	240	16.0	08/28/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2024	ND	218	109	200	2.16	
DRO >C10-C28*	<10.0	10.0	08/27/2024	ND	209	104	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/27/2024	ND					

Surrogate: 1-Chlorooctane 69.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/27/2024
Reported: 08/28/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: FS 10 3' (H245190-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEX	<0.300	0.300	08/27/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	08/28/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2024	ND	218	109	200	2.16	
DRO >C10-C28*	<10.0	10.0	08/27/2024	ND	209	104	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/27/2024	ND					

Surrogate: 1-Chlorooctane 78.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/27/2024
Reported: 08/28/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SW 03 0-9' (H245190-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEx	<0.300	0.300	08/27/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	08/28/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2024	ND	218	109	200	2.16	
DRO >C10-C28*	<10.0	10.0	08/27/2024	ND	209	104	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/27/2024	ND					

Surrogate: 1-Chlorooctane 78.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
DAVID MCINNIS
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received: 08/27/2024
Reported: 08/28/2024
Project Name: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Location: XTO 32.270479,-103.937524

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SW 04 0-4' (H245190-06)

BTEx 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204	
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911	
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14	
Total BTEX	<0.300	0.300	08/27/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 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	288	16.0	08/28/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2024	ND	218	109	200	2.16	
DRO >C10-C28*	<10.0	10.0	08/27/2024	ND	209	104	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/27/2024	ND					

Surrogate: 1-Chlorooctane 77.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

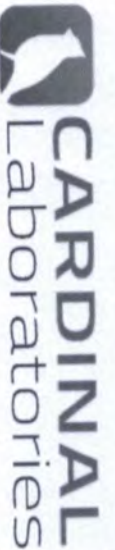
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: XTO Energy Inc.

Attn: Amy Ruth

Address: 3104 E. Green St.

City: Carlsbad

State: NM Zip: 88220

Phone #:

Fax #:

Company Name: Ensolum, LLC

Project Manager: David Mcinnis

Address: 3122 National Parks Hwy

City: Carlsbad State: NM Zip: 88220

Phone #: 409-454-3009 Fax #:

Project #: 03C1558456 Project Owner: XTO

Project Name: Remuda 500 Battery

Project Location: 32.270479, - 103.937524

Sampler Name: Jesse Dorman

FOR LAB USE ONLY

FOR LAB USE ONLY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	DATE	TIME	BTEX	TPH	CHLORIDE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

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Relinquished By: *[Signature]* Received By: *[Signature]*

Date: 8-23-24 Time: 1:37

Relinquished By: *[Signature]* Received By: *[Signature]*

Date: 8-23-24 Time: 1:37

Delivered By: (Circle One) Observed Temp. °C: 18.2

Sampler - UPS - Bus - Other: Corrected Temp. °C: 18.2

CHECKED BY: (Initials)

Turnaround Time: 140-0.4

Standard

Thermometer ID: 7773

Bacteria (only) Sample Condition

Corrected Temp. °C

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

All Results are emailed. Please provide Email address: DMcinnis@ensolum.com

REMARKS: Cost Center: 1067601001

Incident ID: nAPP2418053192

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

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

September 25, 2024

DAVID MCINNIS

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: REMUDA 500 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 09/06/24 15:26.

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

www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

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

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

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

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:Reported:
25-Sep-24 08:29

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW 07 0-4'	H245416-01	Soil	06-Sep-24 12:00	06-Sep-24 15:26
SW 07 4-9'	H245416-02	Soil	06-Sep-24 12:02	06-Sep-24 15:26
SW 05 0-4'	H245416-03	Soil	06-Sep-24 12:04	06-Sep-24 15:26
SW 06 0-4'	H245416-04	Soil	06-Sep-24 12:06	06-Sep-24 15:26
FS 11 4'	H245416-05	Soil	06-Sep-24 12:08	06-Sep-24 15:26
FS 12 4'	H245416-06	Soil	06-Sep-24 12:10	06-Sep-24 15:26
BF 01	H245416-07	Soil	06-Sep-24 12:12	06-Sep-24 15:26

09/19/24 - Client changed the sample IDs for -01 and -02 (see COC). This is the revised report and will replace the one sent on 09/19/24.

09/25/24 - Client changed the depth on sample -02 (see COC). This is the 2nd revision of the report and will replace the one sent on 09/19/24.

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

SW 07 0-4'
H245416-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	128		16.0	mg/kg	4	4090913	HM	09-Sep-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4090622	JH	07-Sep-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	97.3 %	71.5-134	4090622	JH	07-Sep-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	

Surrogate: 1-Chlorooctane	70.9 %	48.2-134	4090623	MS	06-Sep-24	8015B	
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Surrogate: 1-Chlorooctadecane	80.8 %	49.1-148	4090623	MS	06-Sep-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

SW 07 4-9'
H245416-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	4090913	HM	09-Sep-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4090622	JH	07-Sep-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			97.0 %	71.5-134		4090622	JH	07-Sep-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	

Surrogate: 1-Chlorooctane			85.0 %	48.2-134		4090623	MS	06-Sep-24	8015B	
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Surrogate: 1-Chlorooctadecane			97.7 %	49.1-148		4090623	MS	06-Sep-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

SW 05 0-4'
H245416-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	224		16.0	mg/kg	4	4090913	HM	09-Sep-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4090622	JH	07-Sep-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 71.5-134 4090622 JH 07-Sep-24 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	

Surrogate: 1-Chlorooctane 66.8 % 48.2-134 4090623 MS 06-Sep-24 8015B

Surrogate: 1-Chlorooctadecane 76.3 % 49.1-148 4090623 MS 06-Sep-24 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

SW 06 0-4'
H245416-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	4090913	HM	09-Sep-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4090622	JH	07-Sep-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			100 %	71.5-134		4090622	JH	07-Sep-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	

Surrogate: 1-Chlorooctane			96.7 %	48.2-134		4090623	MS	06-Sep-24	8015B	
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Surrogate: 1-Chlorooctadecane			112 %	49.1-148		4090623	MS	06-Sep-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

FS 11 4'
H245416-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	4090913	HM	09-Sep-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4090622	JH	07-Sep-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134 4090622 JH 07-Sep-24 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	

Surrogate: 1-Chlorooctane 92.5 % 48.2-134 4090623 MS 06-Sep-24 8015B

Surrogate: 1-Chlorooctadecane 105 % 49.1-148 4090623 MS 06-Sep-24 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

FS 12 4'
H245416-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	112		16.0	mg/kg	4	4090913	HM	09-Sep-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4090622	JH	07-Sep-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	100 %	71.5-134	4090622	JH	07-Sep-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	

Surrogate: 1-Chlorooctane	88.2 %	48.2-134	4090623	MS	06-Sep-24	8015B	
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Surrogate: 1-Chlorooctadecane	100 %	49.1-148	4090623	MS	06-Sep-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

BF 01
H245416-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	4090913	HM	09-Sep-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4090622	JH	07-Sep-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4090622	JH	07-Sep-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			99.4 %	71.5-134		4090622	JH	07-Sep-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4090623	MS	06-Sep-24	8015B	

Surrogate: 1-Chlorooctane			85.2 %	48.2-134		4090623	MS	06-Sep-24	8015B	
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Surrogate: 1-Chlorooctadecane			95.6 %	49.1-148		4090623	MS	06-Sep-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 4090913 - 1:4 DI Water									
Blank (4090913-BLK1)					Prepared & Analyzed: 09-Sep-24				
Chloride	ND	16.0	mg/kg						
LCS (4090913-BS1)					Prepared & Analyzed: 09-Sep-24				
Chloride	416	16.0	mg/kg	400	104	80-120			
LCS Dup (4090913-BSD1)					Prepared & Analyzed: 09-Sep-24				
Chloride	416	16.0	mg/kg	400	104	80-120	0.00	20	

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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4090622 - Volatiles**Blank (4090622-BLK1)**

Prepared: 06-Sep-24 Analyzed: 07-Sep-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		99.5	71.5-134			

LCS (4090622-BS1)

Prepared & Analyzed: 06-Sep-24

Benzene	1.99	0.050	mg/kg	2.00		99.7	82.8-130			
Toluene	1.93	0.050	mg/kg	2.00		96.3	86-128			
Ethylbenzene	1.94	0.050	mg/kg	2.00		96.9	85.9-128			
m,p-Xylene	3.87	0.100	mg/kg	4.00		96.8	89-129			
o-Xylene	1.91	0.050	mg/kg	2.00		95.5	86.1-125			
Total Xylenes	5.78	0.150	mg/kg	6.00		96.3	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0504		mg/kg	0.0500		101	71.5-134			

LCS Dup (4090622-BSD1)

Prepared: 06-Sep-24 Analyzed: 07-Sep-24

Benzene	1.97	0.050	mg/kg	2.00		98.4	82.8-130	1.28	15.8	
Toluene	1.92	0.050	mg/kg	2.00		96.2	86-128	0.108	15.9	
Ethylbenzene	1.94	0.050	mg/kg	2.00		96.9	85.9-128	0.0405	16	
m,p-Xylene	3.87	0.100	mg/kg	4.00		96.7	89-129	0.0759	16.2	
o-Xylene	1.91	0.050	mg/kg	2.00		95.4	86.1-125	0.0639	16.7	
Total Xylenes	5.78	0.150	mg/kg	6.00		96.3	88.2-128	0.0720	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0502		mg/kg	0.0500		100	71.5-134			

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: REMUDA 500 BATTERY
Project Number: 03C1558456
Project Manager: DAVID MCINNIS
Fax To:

Reported:
25-Sep-24 08:29

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4090623 - General Prep - Organics**Blank (4090623-BLK1)**

Prepared: 06-Sep-24 Analyzed: 07-Sep-24

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	45.0		mg/kg	50.0		89.9	48.2-134			
Surrogate: 1-Chlorooctadecane	49.0		mg/kg	50.0		98.1	49.1-148			

LCS (4090623-BS1)

Prepared & Analyzed: 06-Sep-24

GRO C6-C10	189	10.0	mg/kg	200		94.4	66.4-123			
DRO >C10-C28	185	10.0	mg/kg	200		92.6	66.5-118			
Total TPH C6-C28	374	10.0	mg/kg	400		93.5	77.6-123			
Surrogate: 1-Chlorooctane	51.3		mg/kg	50.0		103	48.2-134			
Surrogate: 1-Chlorooctadecane	57.2		mg/kg	50.0		114	49.1-148			

LCS Dup (4090623-BSD1)

Prepared & Analyzed: 06-Sep-24

GRO C6-C10	184	10.0	mg/kg	200		92.0	66.4-123	2.48	17.7	
DRO >C10-C28	182	10.0	mg/kg	200		90.8	66.5-118	1.94	21	
Total TPH C6-C28	366	10.0	mg/kg	400		91.4	77.6-123	2.21	18.5	
Surrogate: 1-Chlorooctane	48.7		mg/kg	50.0		97.4	48.2-134			
Surrogate: 1-Chlorooctadecane	55.0		mg/kg	50.0		110	49.1-148			

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Notes and Definitions

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

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A handwritten signature in cursive script, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

- * * Customer requested Depth

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 386908

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 386908
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2418053192
Incident Name	NAPP2418053192 REMUDA 500 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Deferral Request Received

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	REMUDA 500 BATTERY
Date Release Discovered	06/27/2024
Surface Owner	State

Incident Details	
<i>Please answer all the questions in this group.</i>	
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	
<i>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.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Pipeline (Any) Produced Water Released: 37 BBL Recovered: 0 BBL Lost: 37 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.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 386908

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	386908
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

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: 09/25/2024
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QUESTIONS, Page 3

Action 386908

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number: 386908
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Site Characterization	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 100 and 200 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1000 (ft.) and ½ (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	896
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	30.5
GRO+DRO (EPA SW-846 Method 8015M)	30.5
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	07/15/2024
On what date will (or did) the final sampling or liner inspection occur	09/06/2024
On what date will (or was) the remediation complete(d)	09/06/2024
What is the estimated surface area (in square feet) that will be reclaimed	2220
What is the estimated volume (in cubic yards) that will be reclaimed	330
What is the estimated surface area (in square feet) that will be remediated	2220
What is the estimated volume (in cubic yards) that will be remediated	330
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 4

Action 386908

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	386908
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

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: 09/25/2024
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 386908

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	386908
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Active production equipment and process piping including separators
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	2777
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	617
Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	
Enter the facility ID (F#) on which this deferral should be granted	REMUDA 500 TANK BATTERY [FAB1834557126]
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
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: 09/25/2024

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QUESTIONS, Page 6

Action 386908

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	386908
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	378909
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/06/2024
What was the (estimated) number of samples that were to be gathered	30
What was the sampling surface area in square feet	6000

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

Action 386908

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 386908
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	Deferral approved. Deferral of SW01 is approved until plugging and abandonment or a major facility deconstruction, whichever comes first. A complete and accurate remediation report and/or reclamation report will need to be submitted at that time.	10/21/2024