



August 5, 2024

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

**Re: Closure Request  
Brushy Draw 30-31 Federal Battery  
Incident Number nAPP2413031273  
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document site assessment, excavation, and soil sampling activities at the Brushy Draw 30-31 Federal 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 and crude oil onto the well pad. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this *Closure Request*, describing site assessment, delineation, and excavation activities that have occurred and requesting remediation closure for Incident Number nAPP2413031273.

### **SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit B, Section 31, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.092016°, -103.918534°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On May 7, 2024, corrosion of a flowline resulted in the release of approximately 42 barrels (bbls) of produced water and 9 bbls of crude oil onto the pad surface. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; 41 bbls of produced water and 9 bbls of crude oil were recovered. XTO submitted a Notification of Release to the New Mexico Oil Conservation Division (NMOCD) on May 9, 2024, and submitted a Release Notification Form C-141 (Form C-141) on May 21, 2024. The release was assigned Incident Number nAPP2413031273.

### **SITE CHARACTERIZATION AND CLOSURE CRITERIA**

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

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. In February 2020 a soil boring permitted by the New Mexico Office of the State Engineer (NMOSE; C-4394) was drilled approximately 1.4 miles to the north of the Site. Soil boring C-4394 was drilled to a total depth of 110 feet bgs. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole was

XTO Energy, Inc  
Closure Request  
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left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater was greater than 110 feet bgs. The referenced well record is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 930 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 (low potential karst designation area). Potential Site receptors are identified on Figure 1.

Based on the distance of soil boring C-4394 exceeding 0.5 miles from the Site, a guideline preferred by the NMOCD, 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
- TPH: 100 mg/kg
- Chloride: 600 mg/kg

## **SITE ASSESSMENT ACTIVITIES**

On May 9, 2024, Ensolum personnel visited the Site to evaluate the release extent based on visual observations. The release extent was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 2. Photographic documentation from the site assessment is presented in a Photographic Log included in Appendix B.

## **DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES**

Between May 29, 2024 and June 18, 2024, Ensolum personnel were at the Site to oversee delineation and excavation activities. Delineation boreholes BH01 through BH04 were advanced via hand auger to depths ranging from 1-foot to 2 feet bgs. Boreholes BH01 through BH04 were advanced within the release extent to assess the vertical extent of the release. Delineation soil samples were collected from each borehole at depths ranging from 0.5 feet to 2 feet bgs. The 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 visual observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil sample locations are depicted on Figure 2.

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 (Cardinal) in Hobbs, New Mexico, for analysis of the following contaminants 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 Standard Methods SM4500.

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Laboratory analytical results for delineation borehole samples BH01 through BH04, collected at depths ranging from 1 foot to 2 feet bgs indicated that all COC concentrations were compliant with the Closure Criteria and successfully defined the vertical extent of the release.

Impacted soil was excavated from the release area as indicated by visible staining and elevated field screenings. Excavation activities were performed using a trackhoe and transport vehicle. The excavation occurred on the well pad near the production equipment. To direct excavation activities, Ensolum personnel screened soil for VOCs and chloride. Following removal of impacted soil, Ensolum personnel collected 5-point composite soil samples representing no more than 200 square feet from the floor and sidewalls of the excavation. The 5-point composite soil samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation floor soil samples, FS01 through FS15, were collected from the floor of the excavation at depths ranging from 2 feet to 6 feet bgs. Confirmation sidewall soil samples SW01 through SW04 were collected from the sidewalls of the excavation at depths ranging from ground surface to 6 feet bgs. The confirmation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and confirmation soil sample locations are presented on Figure 3.

The final excavation extent measured approximately 2,400 square feet. A total of approximately 228 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at OWL Landfill Services disposal facility located in Jal, New Mexico. After completion of confirmation sampling, the excavation area was secured with fencing.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all confirmation soil samples collected from the final excavation extent indicated all COC concentrations were compliant with the Closure Criteria. Laboratory analytical results for confirmation soil sample FS14 collected at 2 feet bgs indicated chloride concentrations exceeding reclamation requirement; however, the soils in the vicinity of this sample were removed during additional excavation activities and FS14A was subsequently collected at 6 feet bgs. Laboratory analytical results for FS14A indicated COC concentrations below the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

## CLOSURE REQUEST

Site assessment, delineation, and excavation activities were conducted at the Site to address the May 7, 2024, release of produced water and crude oil. Laboratory analytical results for all confirmation soil samples collected from the final excavation extent indicated that all COC concentrations were compliant with the Closure Criteria. Based on soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing Site conditions.

Excavation of impacted soil has mitigated impacts at the Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number nAPP2413031273.

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

XTO Energy, Inc  
Closure Request  
Brushy Draw 30-31 Federal Battery



Sincerely,  
**Ensolum, LLC**

A handwritten signature in black ink that reads "Tracy Hillard".

Tracy Hillard  
Project Manager

A handwritten signature in black ink that reads "Tacoma Morrissey".

Tacoma Morrissey  
Associate Principal

cc: Amy Ruth, XTO  
Alan Romero, XTO  
BLM

Appendices:

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

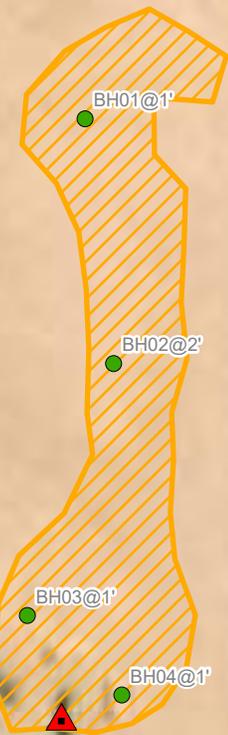


FIGURES

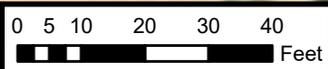


### Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Release Extent
- ▲ Point of Release



Notes:  
 Sample ID @ Depth Below Ground Surface.  
 Samples in Gray removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)



## Delineation Soil Sample Locations

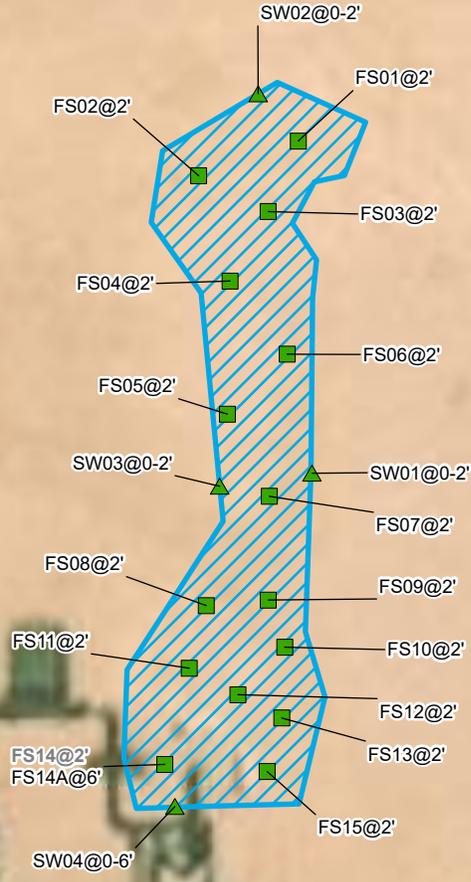
XTO Energy, Inc  
 Brushy Draw 30-31 Fed Battery  
 Incident Number: nAPP2413031273  
 Unit B, Sec 31, T25S, R30E  
 Eddy County, New Mexico

### FIGURE

# 2

### Legend

- Excavation Floor Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Sample in Compliance with Closure Criteria
- Excavation Extent



Notes:  
 Sample ID @ Depth Below Ground Surface.  
 Grey text indicate soil sample was removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)



## Excavation Soil Sample Locations

XTO Energy, Inc  
 Brushy Draw 30-31 Fed Battery  
 Incident Number: nAPP2413031273  
 Unit B, Sec 31, T25S, R30E  
 Eddy County, New Mexico

**FIGURE**  
**3**



TABLES



**TABLE 1  
SOIL SAMPLE ANALYTICAL RESULTS  
Brushy Draw 30-31 Fed 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)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
<b>Delineation Soil Samples</b>										
BH01	05/29/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
BH02	05/29/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
BH03	05/29/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
BH04	05/29/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
<b>Confirmation Soil Samples</b>										
FS01	05/29/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
FS02	05/29/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS03	05/29/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS04	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS05	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS06	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS07	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS08	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS09	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS10	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS11	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
FS12	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS13	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	432
FS14	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,680
FS14A	06/18/2024	6	<0.050	<0.300	<10.0	35.0	<10.0	35.0	35.0	192
FS15	05/30/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW01	05/30/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320
SW02	05/30/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SW03	05/30/2024	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SW04	06/18/2024	0-6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160

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 1 Closure Criteria or reclamation standard 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

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

Identifier: MW01 C 4394 Date: 2/4/2020  
 Project Name: PLU 423 RP Number: ZRP-3790  
 Logged By: FS Method: SONIC  
 Hole Diameter: 4" / 6" Total Depth: 110'

**LITHOLOGIC / SOIL SAMPLING LOG**

Lat/Long: Field Screening: CHLORIDES, PID

Comments: No sampling, lithology remarks only

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					1			hydrovac excavated (refusal @ 1')
D			Z		2			2.5' SAND, dry, well graded, coarse-fine grain, light brwn-tan, no stain, no odor
					3		SW-S	
D			Z		4			5' few silty sand pockets, reddish brwn, no plas, non cohesive
					5			
D			Z		6			
					7		SP	6' SAND, dry, poorly graded, light brwn-brwn, fine-very fine
D			Z		8			
					9			7.5' some mod. consol. ss
D			Z		10		SW-S	light brwn-brwn, sub rounded
					11			10' abundant ss 10-11' color change
					12			12' ss gravel? absent tan-off white
					13		SP	16' abundant ss gravel 13' back t/ (mod consol) light brwn-brwn
D			Z		14			19' abundant - some
					15			
D			Z		16			21.5' sandstone, light, abundant brwn-tan, dry, mod well consolidated
					17		SW-S	
D			Z		18			23' sandstone chunks absent
					19			
					20			
D			Z		21			
					22			
					23			
D			Z		24			
					25			



**LT Environmental, Inc.**  
 508 West Stevens Street  
 Carlsbad, New Mexico 88220

Compliance · Engineering · Remediation

Identifier:  
**MW01 C 4394**

Date:  
**2/4/2020**

Project Name:  
**PLU 423**

RP Number:  
~~2RP-2674~~  
**2RP-3790**

**LITHOLOGIC / SOIL SAMPLING LOG**

Logged By: **FS**

Method: **SONIC**

Lat/Long:

Field Screening: ~~CHLORIDES, PID-~~

Hole Diameter: **4 1/8"**

Total Depth: **110'**

Comments:

rig adding water

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



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

Identifier: <b>MW01 C 4394</b>	Date: <b>2/4/2020</b>
Project Name: <b>PLU 423</b>	RP Number: <b>ZRP-3790</b>
Logged By: <b>FS</b>	Method: <b>sonic</b>
Hole Diameter: <b>4" / 6"</b>	Total Depth: <b>110'</b>

**LITHOLOGIC / SOIL SAMPLING LOG**

Lat/Long: Field Screening: **CHLORIDES, PID**

Comments:

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



LT Environmental, Inc.  
508 West Stevens Street  
Carlsbad, New Mexico 88220

Compliance · Engineering · Remediation

Identifier: MWDI C 4394 Date: 2/4/2020  
Project Name: PLU 423 RP Number: ZRP-3790

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: Field Screening: CHLORIDES, PID. Logged By: FS, BB Method: sonic  
Hole Diameter: 6 1/4" Total Depth: 110'

Comments:

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

 <p style="text-align: center;"><b>LT Environmental, Inc.</b> 508 West Stevens Street Carlsbad, New Mexico 88220</p> <p style="text-align: center;">Compliance · Engineering · Remediation</p>		Identifier: MWF 4394	Date: 2/5/2020					
		Project Name: PLU 423	RP Number: 2RP-3790					
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>		Logged By: BP	Method: Sonic					
Lat/Long:		Field Screening: CHLORIDES, PID.	Hole Diameter: 6" / 4"					
			Total Depth: 110'					
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D			N		101		CH SP-5	101' - 105' SANDSTONE, tan - light brown, dry, moderately consolidated, calcareous cemented, poorly graded, no stain, no odor.
D			N		102			
D			N		103			
D			N		104			
M			N		105		CH	105' - 110' CLAY, moist, dark brown - brown, high plasticity, cohesive, trace tan sand laminations, no stain, no odor.
D			N		106			
D			N		107			107' - 109' tan - light brown well consolidated fine grained sandstone stringer.
D			N		108			
M			N		109			
					110			
					111		TD @ 110'	
					112			
					113			
					114			
					115			
					116			
					117			
					118			
					119			
					120			
					121			
					122			
					123			
					124			
					125			



## APPENDIX B

### Photographic Log

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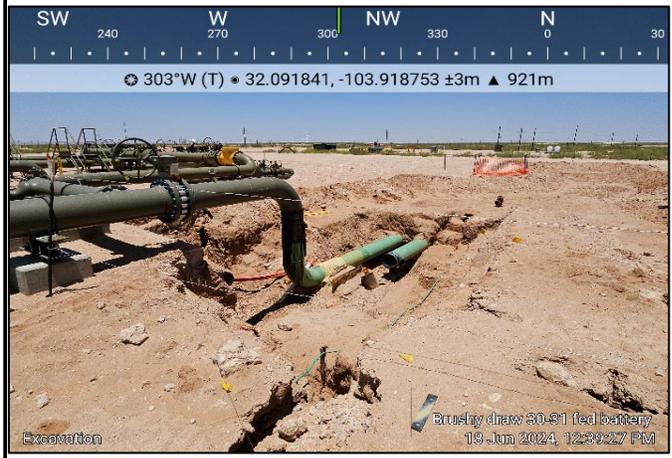


**Photographic Log**  
XTO Energy, Inc  
Brushy Draw 30-31 Fed Battery  
Incident Number NAPP2413031273



Photograph: 1 Date: 5/7/2024  
Description: Release point area.  
View: Northwest

Photograph: 2 Date: 5/9/2024  
Description: Surficial staining, release extent area.  
View: North



Photograph: 3 Date: 5/30/2024  
Description: Northern excavation extent.  
View: Southeast

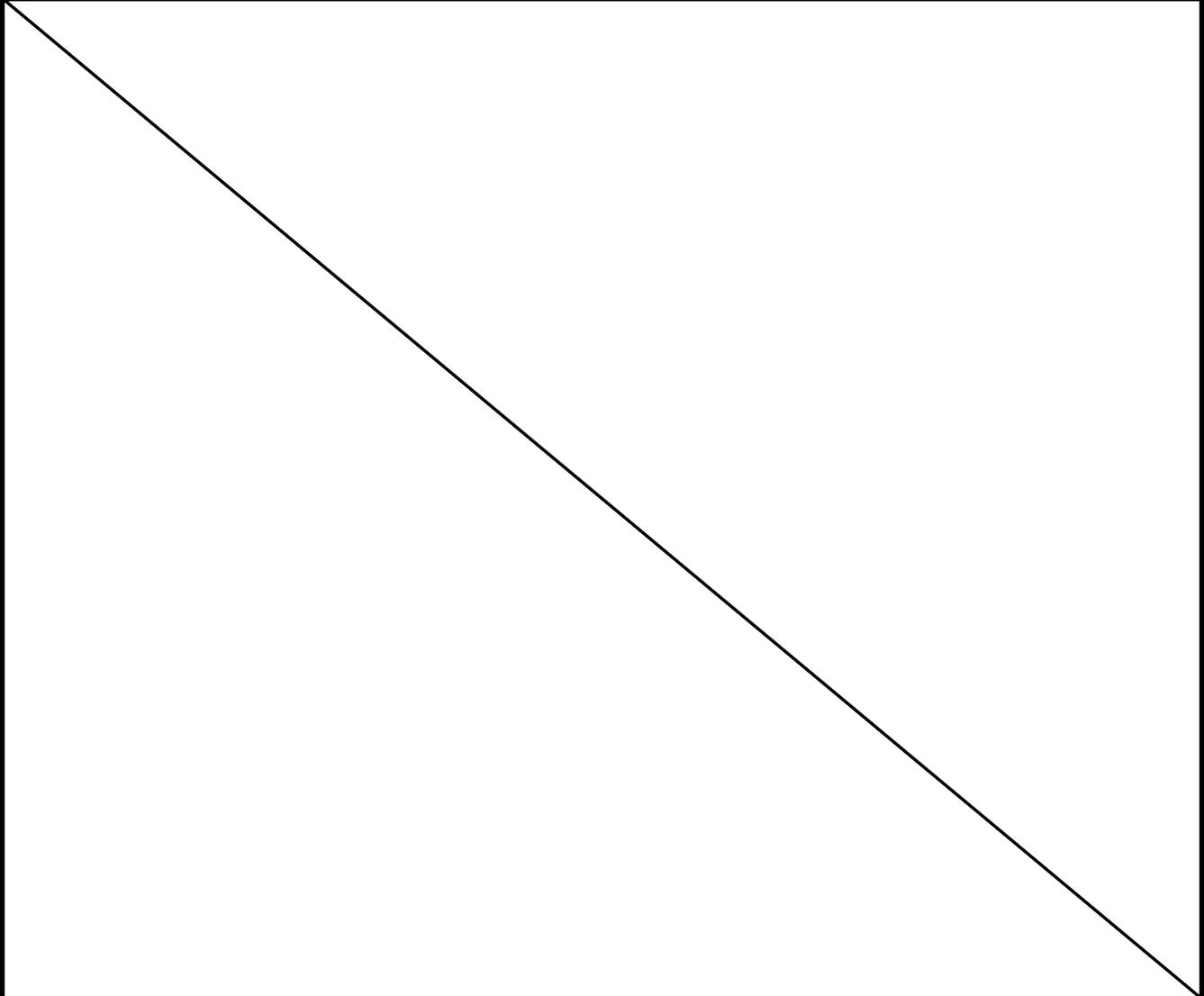
Photograph: 4 Date: 6/18/2024  
Description: Final excavation extent.  
View: Northwest



## APPENDIX C

### Lithologic Soil Sampling Logs

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				Sample Name: BH01			Date: 05/29/2024		
				Site Name: BRUSHY DRAW 30-31 FEDERAL BATTERY					
				Incident Number: NAPP2413031273					
				Job Number: 03C1558370					
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>						Logged By: O. Hamdy		Method: Hand Auger	
Coordinates: 32.0921388, -103.9188441						Hole Diameter: 3"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
	2,055	0.3	Y			0 0.5	CHHE	Pad Caliche; no odor	
	<168	0.3	N	BH01	1	1	SW	Sand; well graded fine to coarse sand TD at 1' bgs	
									

					Sample Name: BH02		Date: 05/29/2024	
					Site Name: BRUSHY DRAW 30-31 FEDERAL BATTERY			
					Incident Number: NAPP2413031273			
					Job Number: 03C1558370			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: O. Hamdy		Method: Hand Auger	
Coordinates: 32.0920328, -103.9188307					Hole Diameter: 3"		Total Depth: 2'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
	2,900	0.4	N			0 0.5	CHHE	Pad Caliche
	767	0.0	N			1	SW	Sand; well graded fine to coarse sand
	<168	0.0	N	BH02	2	2		TD at 2' bgs

					Sample Name: BH03		Date: 05/29/2024		
					Site Name: BRUSHY DRAW 30-31 FEDERAL BATTERY				
					Incident Number: NAPP2413031273				
					Job Number: 03C1558370				
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: O. Hamdy		Method: Hand Auger		
Coordinates: 32.0919248, -103.9188776					Hole Diameter: 3"		Total Depth: 1'		
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
	1,562	0.1	N			0 0.5	CHHE	Pad Caliche; no odor	
	274	0.2	N	BH03	1	1	SW	Sand; well graded fine to coarse sand TD at 1' bgs	

					Sample Name: BH04		Date: 05/29/2024	
					Site Name: BRUSHY DRAW 30-31 FEDERAL BATTERY			
					Incident Number: NAPP2413031273			
					Job Number: 03C1558370			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: O. Hamdy		Method: Hand Auger	
Coordinates: 32.0918756, -103.9188292					Hole Diameter: 3"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
	2,200	0.2	N			0 0.5	CHHE	Pad Caliche; no odor
	459	0.0	N	BH04	1	1	SW	Sand; well graded fine to coarse sand TD at 1' bgs



## APPENDIX D

### Laboratory Analytical Reports & Chain of Custody Documentation

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

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June 04, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: BRUSHY DRAW 30-31 FED BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/30/24 12:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/29/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: BH 01 1 (H243015-01)**

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	05/31/2024	ND	1.89	94.7	2.00	5.81	
Toluene*	<0.050	0.050	05/31/2024	ND	1.85	92.6	2.00	5.97	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.91	95.4	2.00	6.21	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.72	95.3	6.00	5.86	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/04/2024	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	190	95.0	200	0.861	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	208	104	200	7.53	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 86.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.6 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/29/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: BH 02 2 (H243015-02)**

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	05/31/2024	ND	1.89	94.7	2.00	5.81	
Toluene*	<0.050	0.050	05/31/2024	ND	1.85	92.6	2.00	5.97	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.91	95.4	2.00	6.21	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.72	95.3	6.00	5.86	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	80.0	16.0	06/04/2024	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	190	95.0	200	0.861	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	208	104	200	7.53	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 82.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.3 % 49.1-148

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\*=Accredited Analyte

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/29/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: BH 03 1 (H243015-03)**

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	05/31/2024	ND	1.89	94.7	2.00	5.81	
Toluene*	<0.050	0.050	05/31/2024	ND	1.85	92.6	2.00	5.97	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.91	95.4	2.00	6.21	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.72	95.3	6.00	5.86	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	06/04/2024	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	190	95.0	200	0.861	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	208	104	200	7.53	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 83.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.4 % 49.1-148

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/29/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: BH 04 1 (H243015-04)**

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	05/31/2024	ND	1.89	94.7	2.00	5.81	
Toluene*	<0.050	0.050	05/31/2024	ND	1.85	92.6	2.00	5.97	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.91	95.4	2.00	6.21	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.72	95.3	6.00	5.86	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 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	112	16.0	06/04/2024	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	190	95.0	200	0.861	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	208	104	200	7.53	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 90.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.8 % 49.1-148

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\*=Accredited Analyte

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/29/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 01 2 (H243015-05)**

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	05/31/2024	ND	1.89	94.7	2.00	5.81		
Toluene*	<0.050	0.050	05/31/2024	ND	1.85	92.6	2.00	5.97		
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.91	95.4	2.00	6.21		
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.72	95.3	6.00	5.86		
Total BTEX	<0.300	0.300	05/31/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 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	16.0	16.0	06/04/2024	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	190	95.0	200	0.861		
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	208	104	200	7.53		
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND						

Surrogate: 1-Chlorooctane 90.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.4 % 49.1-148

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\*=Accredited Analyte

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/29/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 02 2 (H243015-06)**

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	05/31/2024	ND	1.89	94.7	2.00	5.81		
Toluene*	<0.050	0.050	05/31/2024	ND	1.85	92.6	2.00	5.97		
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.91	95.4	2.00	6.21		
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.72	95.3	6.00	5.86		
Total BTEX	<0.300	0.300	05/31/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	06/04/2024	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	190	95.0	200	0.861		
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	208	104	200	7.53		
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND						

Surrogate: 1-Chlorooctane 90.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/29/2024
Reported:	06/04/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 03 2 (H243015-07)**

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	05/31/2024	ND	1.89	94.7	2.00	5.81	
Toluene*	<0.050	0.050	05/31/2024	ND	1.85	92.6	2.00	5.97	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.91	95.4	2.00	6.21	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.72	95.3	6.00	5.86	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 121 % 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
<b>Chloride</b>	<b>48.0</b>	16.0	06/04/2024	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	190	95.0	200	0.861	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	208	104	200	7.53	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 95.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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



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

Notes and Definitions

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

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



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

CHAIN-OF-CUSTODY AND ANALYSIS

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC  
Project Manager: Ben Bellill  
Address: 601 N. Marland Street, Suite 400  
City: Midland, Carlsbad  
Phone #: 505-315-5837  
Project #: 03C1558370  
Project Name: Brushy Draw 30-31 Fed Battery  
Project Location: Omar Hamdy

State: TX  
City: Midland  
Project Owner: XTO  
State: NM  
Zip: 79701  
Zip: 88220  
Attn: Amy Ruth  
Address: 3104 E Green  
City: Carlsbad  
State: NM  
Zip: 88220

P.O. #:   
Company: XTO Energy  
Address: 3104 E Green  
City: Carlsbad  
State: NM  
Zip: 88220

Project Location: Omar Hamdy  
Project Name: Omar Hamdy  
Project Location: Omar Hamdy

Sample Name: Omar Hamdy  
FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	MATRIX							DATE	TIME	TPH 8015	BTEX 8021	Chloride 4500	
				# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :						ACID/BASE:
H24B015	BH01	1	(G)				X					5/29/24	10:15	X	X	X
	BH02	2	(G)				X					12:05	12:15	X	X	X
	BH03	1	(G)				X					12:30	15:10	X	X	X
	BH04	2	(G)				X					15:15	15:15	X	X	X
	ES01	2	(C)				X					15:20	15:20	X	X	X
	ES02	2	(C)				X							X	X	X
	ES03	2	(C)				X							X	X	X

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Relinquished By: Omar Hamdy  
Date: 5/30/24  
Received By: [Signature]  
Date: 5/30/24

Observed Temp. °C: 0.9  
Corrected Temp. °C: [Blank]  
Sample Condition: Cool Intact [X] Yes [ ] No [ ]  
CHECKED BY: [Signature]  
Turnaround Time: 05:30:24  
Standard Rush [X] Add'l Phone #: [Blank]  
Bacteria (only) Cool Intact [X] Yes [ ] No [ ]  
Observed Temp. °C: [Blank]  
Corrected Temp. °C: [Blank]



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

---

June 05, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: BRUSHY DRAW 30-31 FED BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/31/24 13:32.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/31/2024	Sampling Date:	05/30/2024
Reported:	06/05/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 06 2 (H243063-01)**

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	06/03/2024	ND	1.65	82.5	2.00	4.25	
Toluene*	<0.050	0.050	06/03/2024	ND	1.75	87.7	2.00	3.85	
Ethylbenzene*	<0.050	0.050	06/03/2024	ND	1.86	93.2	2.00	4.02	
Total Xylenes*	<0.150	0.150	06/03/2024	ND	5.68	94.7	6.00	4.47	
Total BTEX	<0.300	0.300	06/03/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/04/2024	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	06/03/2024	ND	195	97.6	200	3.97	
DRO >C10-C28*	<10.0	10.0	06/03/2024	ND	222	111	200	7.01	
EXT DRO >C28-C36	<10.0	10.0	06/03/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

Cardinal Laboratories

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



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

**Analytical Results For:**

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

Received:	05/31/2024	Sampling Date:	05/30/2024
Reported:	06/05/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 09 2 (H243063-02)**

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	06/03/2024	ND	1.65	82.5	2.00	4.25	
Toluene*	<0.050	0.050	06/03/2024	ND	1.75	87.7	2.00	3.85	
Ethylbenzene*	<0.050	0.050	06/03/2024	ND	1.86	93.2	2.00	4.02	
Total Xylenes*	<0.150	0.150	06/03/2024	ND	5.68	94.7	6.00	4.47	
Total BTEX	<0.300	0.300	06/03/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	64.0	16.0	06/04/2024	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	06/03/2024	ND	195	97.6	200	3.97	
DRO >C10-C28*	<10.0	10.0	06/03/2024	ND	222	111	200	7.01	
EXT DRO >C28-C36	<10.0	10.0	06/03/2024	ND					

Surrogate: 1-Chlorooctane 97.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.2 % 49.1-148

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\*=Accredited Analyte

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



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Handwritten signature of Mike Snyder

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: **Ensolium, LLC**  
 Project Manager: **Beaux Jennings** <sup>PH</sup> Ben Bellill  
 Address: **604 N. Martenfeld Street, Suite 400** <sup>PH</sup> 3122 National Parks Hwy  
 City: **Mitchell** <sup>PH</sup> **Corsica** State: **NM** Zip: **79904 88220**  
 Phone #: **210-219-8858** Fax #: **210-219-8858**  
 Project #: **03C1558370** Project Owner: **XTO**  
 Project Name: **Brushy Draw 30-31 Fed Boat.** City: **Corsica**  
 Project Location: State: **NM** Zip: **88220**  
 Sampler Name: **Omer Handy** Phone #: **575-390-2828**  
 P.O. #: **101 East Marland, Hobbs, NM 88240**  
 Company: **Gog USA Inc. XTO**  
 Attn: **Wade Dittich Amy Ruth**  
 Address: **3164 E. Green St.**  
 City: **Corsica**  
 State: **NM** Zip: **88220**  
 Phone #: **575-390-2828**  
 Fax #: **575-390-2828**

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	TPH	BTEX	Chlorides
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
#143003	FS06	2	C									5/30/24	15:50	X	X	X
	FS09	2	C									5/30/24	15:35	X	X	X

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Relinquished By: **Omer Handy** Date: **5/31/24** Received By: **Stoolickweg**  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Received By: \_\_\_\_\_  
 Delivered By: (Circle One)  UPS  Bus  Other: \_\_\_\_\_  
 Observed Temp. °C: **24.1** Sample Condition:  Intact  Cool  Yes  No  Yes  No  
 Corrected Temp. °C: \_\_\_\_\_  
 CHECKED BY: (Initials) **SH**  
 Turnaround Time: \_\_\_\_\_ Standard  Bacteria (only)   
 Thermometer ID: **#443** **RUSH**  Cool  Intact  Yes  No  Yes  No  
 Correction Factor: **-0.5°C** **#140**  Bacteria (only)  Sample Condition  Observed Temp. °C  Corrected Temp. °C  
 Verbal Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 All Results are emailed. Please provide Email address: **bellill@ensolium.com / Emorrissey@ensolium.com**  
 REMARKS: \_\_\_\_\_  
 † Cardinal cannot accept verbal changes. Please email changes to **celey.keene@cardinallabsnm.com**



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

---

June 06, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: BRUSHY DRAW 30-31 FED BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/30/24 13:59.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder".

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 04 2 (H243034-01)**

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	05/31/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	80.0	16.0	06/03/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 05 2 (H243034-02)**

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	05/31/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	06/03/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 07 2 (H243034-03)**

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	05/31/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	48.0	16.0	06/03/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	204	102	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	211	106	200	3.18	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 08 2 (H243034-04)**

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	05/31/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	05/31/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/03/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 58.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 59.6 % 49.1-148

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



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**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 10 2 (H243034-05)**

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	05/31/2024	ND	2.01	100	2.00	1.94		
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35		
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55		
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42		
Total BTEX	<0.300	0.300	05/31/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	64.0	16.0	06/03/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46		
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35		
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND						

Surrogate: 1-Chlorooctane 73.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 73.8 % 49.1-148

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



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**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 11 2 (H243034-06)**

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	05/31/2024	ND	2.01	100	2.00	1.94		
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35		
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55		
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42		
Total BTEX	<0.300	0.300	05/31/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	192	16.0	06/03/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46		
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35		
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND						

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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



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**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 12 2 (H243034-07)**

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	05/31/2024	ND	2.01	100	2.00	1.94		
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35		
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55		
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42		
Total BTEX	<0.300	0.300	05/31/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	64.0	16.0	06/03/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46		
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35		
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND						

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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



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**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 13 2 (H243034-08)**

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	05/31/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 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	432	16.0	06/03/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/03/2024	ND	200	100	200	1.46	
DRO >C10-C28*	<10.0	10.0	06/03/2024	ND	220	110	200	2.35	
EXT DRO >C28-C36	<10.0	10.0	06/03/2024	ND					

Surrogate: 1-Chlorooctane 94.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.6 % 49.1-148

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



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**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 14 2 (H243034-09)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/31/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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
<b>Chloride</b>	<b>1680</b>	16.0	06/03/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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



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**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: FS 15 2 (H243034-10)**

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	05/31/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	48.0	16.0	06/03/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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



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**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: SW 01 0-2 (H243034-11)**

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	05/31/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	05/31/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	05/31/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	05/31/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	05/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	320	16.0	06/03/2024	ND	432	108	400	3.77	QR-03

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: SW 02 0-2 (H243034-12)**

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	06/01/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	06/01/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	06/01/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	06/01/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	06/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	80.0	16.0	06/03/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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



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

**Analytical Results For:**

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

Received:	05/30/2024	Sampling Date:	05/30/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	BRUSHY DRAW 30-31 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558370	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: SW 03 0-2 (H243034-13)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2024	ND	2.01	100	2.00	1.94	
Toluene*	<0.050	0.050	06/01/2024	ND	1.89	94.4	2.00	5.35	
Ethylbenzene*	<0.050	0.050	06/01/2024	ND	1.89	94.3	2.00	6.55	
Total Xylenes*	<0.150	0.150	06/01/2024	ND	5.55	92.5	6.00	6.42	
Total BTEX	<0.300	0.300	06/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	32.0	16.0	06/03/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/31/2024	ND	200	100	200	1.46	
DRO >C10-C28*	<10.0	10.0	05/31/2024	ND	220	110	200	2.35	
EXT DRO >C28-C36	<10.0	10.0	05/31/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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



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Notes and Definitions

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

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC  
 Project Manager: Ben Bell  
 Address: 601 N Marjorie Street, Suite 400<sup>PH</sup> 3122 National Parks Highway  
 City: Midland Carlsbad State: NM Zip: 79701 88220  
 Phone #: Fax #: P.O. #: Company: XTO Energy  
 Attn: Amy Ruth  
 Address: 3104 E Green St  
 City: Carlsbad State: NM Zip: 88220  
 Project #: 03C1558370 Project Owner: XTO  
 Project Name: Brushy Draw 30-31 Fed Battery  
 Project Location: 32.091923, -103.918837  
 Sampler Name: Omar Hamdy  
 FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	TPH 8015	BTEX 8021	Chloride 4500
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
H243034	FS04	2	C			X	X	X	X	X	X	5/30/24	9:10	X	X	X
	FS05	2	C			X	X	X	X	X	X	9:15	9:15	X	X	X
	FS06	2	C			X	X	X	X	X	X	9:20	9:20	X	X	X
	FS07	2	C			X	X	X	X	X	X	9:25	9:25	X	X	X
	FS08	2	C			X	X	X	X	X	X	9:40	9:40	X	X	X
	FS09	2	C			X	X	X	X	X	X	9:45	9:45	X	X	X
	FS10	2	C			X	X	X	X	X	X	9:50	9:50	X	X	X
	FS11	2	C			X	X	X	X	X	X	9:55	9:55	X	X	X
	FS12	2	C			X	X	X	X	X	X	10:10	10:10	X	X	X
	FS13	2	C			X	X	X	X	X	X	10:15	10:15	X	X	X

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Relinquished By: Omar Hamdy  
 Date: 5/30/24  
 Time: 1:35  
 Received By: Stoddard  
 Date: 5/30/24  
 Time: 1:35

Delivered By: (Circle One) Observed Temp. °C: 5.4i Corrected Temp. °C: Sample Condition: Cool Intact  Yes  No  
 Sampler - UPS - Bus - Other: Corrected Temp. °C: CHECKED BY: (Initials) SJK

Turnaround Time: Standard  Rush   
 Bacteria (only)  Sample Condition: Cool Intact  Observed Temp. °C:  Yes  No  
 Corrected Temp. °C:  Yes  No

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

REMARKS:

FORM-006-R-3-Z-10/07/21

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





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

June 28, 2024

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: BRUSHY DRAW 30-31 FED BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/20/24 14:18.

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](http://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, 88220	Project: BRUSHY DRAW 30-31 FED BATTER Project Number: 03C1558370 Project Manager: BEN BELILL Fax To:	Reported: 28-Jun-24 14:01
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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS 14 A 6'	H243639-01	Soil	18-Jun-24 10:50	20-Jun-24 14:18
SW 04 0-6'	H243639-02	Soil	18-Jun-24 12:15	20-Jun-24 14:18

06/28/24 - Client changed the sample ID on -02 (see COC). This is the revised report and will replace the one sent on 06/26/24.

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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: BRUSHY DRAW 30-31 FED BATTER Project Number: 03C1558370 Project Manager: BEN BELILL Fax To:	Reported: 28-Jun-24 14:01
--	---	------------------------------

**FS 14 A 6'  
H243639-01 (Soil)**

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

**Inorganic Compounds**

<b>Chloride</b>	<b>192</b>		16.0	mg/kg	4	4062423	HM	24-Jun-24	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4062119	JH	24-Jun-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4062119	JH	24-Jun-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4062119	JH	24-Jun-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4062119	JH	24-Jun-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4062119	JH	24-Jun-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	71.5-134		4062119	JH	24-Jun-24	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4062104	ms	24-Jun-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>35.0</b>		10.0	mg/kg	1	4062104	ms	24-Jun-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4062104	ms	24-Jun-24	8015B	

Surrogate: 1-Chlorooctane			63.7 %	48.2-134		4062104	ms	24-Jun-24	8015B	
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Surrogate: 1-Chlorooctadecane			63.1 %	49.1-148		4062104	ms	24-Jun-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: BRUSHY DRAW 30-31 FED BATTER Project Number: 03C1558370 Project Manager: BEN BELILL Fax To:	Reported: 28-Jun-24 14:01
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**SW 04 0-6'  
H243639-02 (Soil)**

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

**Inorganic Compounds**

Chloride	160		16.0	mg/kg	4	4062423	HM	24-Jun-24	4500-CI-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4062119	JH	24-Jun-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4062119	JH	24-Jun-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4062119	JH	24-Jun-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4062119	JH	24-Jun-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4062119	JH	24-Jun-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			98.3 %	71.5-134		4062119	JH	24-Jun-24	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4062104	ms	24-Jun-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4062104	ms	24-Jun-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4062104	ms	24-Jun-24	8015B	

Surrogate: 1-Chlorooctane			66.2 %	48.2-134		4062104	ms	24-Jun-24	8015B	
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Surrogate: 1-Chlorooctadecane			64.8 %	49.1-148		4062104	ms	24-Jun-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: BRUSHY DRAW 30-31 FED BATTER Project Number: 03C1558370 Project Manager: BEN BELILL Fax To:	Reported: 28-Jun-24 14:01
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**Inorganic Compounds - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 4062423 - 1:4 DI Water</b>										
<b>Blank (4062423-BLK1)</b>										
Prepared & Analyzed: 24-Jun-24										
Chloride	ND	16.0	mg/kg							
<b>LCS (4062423-BS1)</b>										
Prepared & Analyzed: 24-Jun-24										
Chloride	432	16.0	mg/kg	400		108	80-120			
<b>LCS Dup (4062423-BSD1)</b>										
Prepared & Analyzed: 24-Jun-24										
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

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**Analytical Results For:**

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: BRUSHY DRAW 30-31 FED BATTER Project Number: 03C1558370 Project Manager: BEN BELILL Fax To:	Reported: 28-Jun-24 14:01
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**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 4062119 - Volatiles**

**Blank (4062119-BLK1)**

Prepared: 21-Jun-24 Analyzed: 24-Jun-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		99.0	71.5-134			

**LCS (4062119-BS1)**

Prepared: 21-Jun-24 Analyzed: 24-Jun-24

Benzene	1.91	0.050	mg/kg	2.00		95.3	82.8-130			
Toluene	1.86	0.050	mg/kg	2.00		93.2	86-128			
Ethylbenzene	2.01	0.050	mg/kg	2.00		100	85.9-128			
m,p-Xylene	3.97	0.100	mg/kg	4.00		99.2	89-129			
o-Xylene	1.94	0.050	mg/kg	2.00		97.0	86.1-125			
Total Xylenes	5.91	0.150	mg/kg	6.00		98.5	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0492		mg/kg	0.0500		98.5	71.5-134			

**LCS Dup (4062119-BSD1)**

Prepared: 21-Jun-24 Analyzed: 24-Jun-24

Benzene	1.92	0.050	mg/kg	2.00		95.8	82.8-130	0.524	15.8	
Toluene	1.86	0.050	mg/kg	2.00		93.1	86-128	0.0720	15.9	
Ethylbenzene	2.01	0.050	mg/kg	2.00		101	85.9-128	0.148	16	
m,p-Xylene	3.98	0.100	mg/kg	4.00		99.5	89-129	0.269	16.2	
o-Xylene	1.94	0.050	mg/kg	2.00		97.1	86.1-125	0.0952	16.7	
Total Xylenes	5.92	0.150	mg/kg	6.00		98.7	88.2-128	0.212	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0490		mg/kg	0.0500		98.1	71.5-134			

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**Analytical Results For:**

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: BRUSHY DRAW 30-31 FED BATTER Project Number: 03C1558370 Project Manager: BEN BELILL Fax To:	Reported: 28-Jun-24 14:01
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**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 4062104 - General Prep - Organics**

<b>Blank (4062104-BLK1)</b>		Prepared: 21-Jun-24 Analyzed: 24-Jun-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	39.7		mg/kg	50.0		79.4	48.2-134			
Surrogate: 1-Chlorooctadecane	36.8		mg/kg	50.0		73.6	49.1-148			

<b>LCS (4062104-BS1)</b>		Prepared: 21-Jun-24 Analyzed: 24-Jun-24								
GRO C6-C10	187	10.0	mg/kg	200		93.5	66.4-123			
DRO >C10-C28	189	10.0	mg/kg	200		94.5	66.5-118			
Total TPH C6-C28	376	10.0	mg/kg	400		94.0	77.6-123			
Surrogate: 1-Chlorooctane	43.3		mg/kg	50.0		86.6	48.2-134			
Surrogate: 1-Chlorooctadecane	39.6		mg/kg	50.0		79.1	49.1-148			

<b>LCS Dup (4062104-BSD1)</b>		Prepared: 21-Jun-24 Analyzed: 24-Jun-24								
GRO C6-C10	190	10.0	mg/kg	200		94.8	66.4-123	1.34	17.7	
DRO >C10-C28	180	10.0	mg/kg	200		90.1	66.5-118	4.77	21	
Total TPH C6-C28	370	10.0	mg/kg	400		92.4	77.6-123	1.68	18.5	
Surrogate: 1-Chlorooctane	51.0		mg/kg	50.0		102	48.2-134			
Surrogate: 1-Chlorooctadecane	45.3		mg/kg	50.0		90.5	49.1-148			

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\*=Accredited Analyte

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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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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC  
 Project Manager: Ben Bellill  
 Address: 3122 National Parks Hwy  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: 989 854 0852 Fax #:  
 Project #: 03C1558370 Project Owner:  
 Project Name: Brushy Draw 30-31 Federal Battery  
 Project Location: 32-091923, 103.918837  
 Sampler Name: Ucel Santillana  
 P.O. #: Company: XTO Energy  
 Attn: Amy Ruth  
 Address: 3104 E. Green St.  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: Fax #:

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
A243639	1 FS14A	6'±	C 1	1	X						6/18/24	1050	Chloride
	2 SLS04	0-4'	C 2	1	X						6/18/24	1215	BTEX
													TPH

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Relinquished By: *[Signature]* Date: 6/20/24  
 Received By: *[Signature]* Date: 6/18/24  
 Turnaround Time: Standard  Rush   
 Thermometer ID #115 Correction Factor -0.5°C  
 Bacteria (only)  Bacteria Intact  Sample Condition  Observed Temp. °C  Corrected Temp. °C

Delivered By: (Circle One) Observed Temp. °C: 15.1  
 Corrected Temp. °C: 15.1  
 Sample Condition: Cool  Intact  Yes  No   
 Checked By: (Initials) *AP*

FORM-006-R-3-21-007121  
 † Cardinal cannot accept verbal changes. Please email changes to caley.keene@cardinallabsnm.com

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**Santa Fe, NM 87505**

QUESTIONS

Action 370478

**QUESTIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 370478
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2413031273
Incident Name	NAPP2413031273 BRUSHY DRAW 30-31 FEDERAL BATTERY @ 0
Incident Type	Other
Incident Status	Remediation Closure Report Received

**Location of Release Source**

Please answer all the questions in this group.

Site Name	Brushy Draw 30-31 Federal Battery
Date Release Discovered	05/07/2024
Surface Owner	Federal

**Incident Details**

Please answer all the questions in this group.

Incident Type	Other
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Corrosion   Pipeline (Any)   Crude Oil   Released: 9 BBL   Recovered: 9 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion   Pipeline (Any)   Produced Water   Released: 42 BBL   Recovered: 41 BBL   Lost: 1 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)	A vac truck was dispatched and recovered 9 Bottoms (sand and mud mix)

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QUESTIONS, Page 2

Action 370478

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 370478
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**QUESTIONS**

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

**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: 08/05/2024
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QUESTIONS, Page 3

Action 370478

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 370478
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	320
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	35
GRO+DRO (EPA SW-846 Method 8015M)	35
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	05/29/2024
On what date will (or did) the final sampling or liner inspection occur	06/18/2024
On what date will (or was) the remediation complete(d)	06/18/2024
What is the estimated surface area (in square feet) that will be reclaimed	2400
What is the estimated volume (in cubic yards) that will be reclaimed	228
What is the estimated surface area (in square feet) that will be remediated	2400
What is the estimated volume (in cubic yards) that will be remediated	228

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

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

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QUESTIONS, Page 4

Action 370478

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 370478
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Remediation Plan (continued)**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	OWL LANDFILL JAL [fJEG1635837366]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> 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: 08/05/2024
--	--

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

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QUESTIONS, Page 5

Action 370478

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 370478
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Deferral Requests Only</b>	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 370478
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>354194</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>06/18/2024</b>
What was the (estimated) number of samples that were to be gathered	<b>5</b>
What was the sampling surface area in square feet	<b>1000</b>

**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	<b>Yes</b>
Have the lateral and vertical extents of contamination been fully delineated	<b>Yes</b>
Was this release entirely contained within a lined containment area	<b>No</b>
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	<b>Yes</b>
What was the total surface area (in square feet) remediated	<b>2400</b>
What was the total volume (cubic yards) remediated	<b>288</b>
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	<b>Yes</b>
What was the total surface area (in square feet) reclaimed	<b>2400</b>
What was the total volume (in cubic yards) reclaimed	<b>288</b>
Summarize any additional remediation activities not included by answers (above)	Site assessment, delineation, and excavation activities were conducted at the Site to address the May 7, 2024, release of produced water and crude oil. Laboratory analytical results for all confirmation soil samples collected from the final excavation extent indicated that all COC concentrations were compliant with the Closure Criteria. Based on soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing Site conditions. Excavation of impacted soil has mitigated impacts at the Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater.

*The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 08/05/2024
--	--

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**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS, Page 7

Action 370478

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 370478
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Reclamation Report</b>	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	No

**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**

CONDITIONS

Action 370478

**CONDITIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 370478
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**CONDITIONS**

Created By	Condition	Condition Date
scwells	None	8/6/2024