



May 5, 2026

**New Mexico Oil Conservation Division**

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

**Re: Remediation Work Plan  
Poker Lake Unit CVX JV PC #006H  
Incident Number nAB1730536457  
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Remediation Work Plan (Work Plan)* to document site assessment, delineation, and soil sampling activities at Poker Lake Unit CVX JV PC #006H (Site). The purpose of the remediation activities was to assess for the presence or absence of impacts to soil following a 2017 release of produced water in a pipeline right-of-way (ROW). The following *Work Plan* describes remedial activities that have occurred and proposes to excavate impacted soil and install a soil boring to investigate depth to groundwater to confirm the Closure Criteria at the Site.

**RELEASE SUMMARY AND SITE BACKGROUND**

The Site is located in Unit P, Section 33, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.1679916°, -103.8785706°) and is associated with oil and gas exploration and production operations on Federal land managed by the Bureau of Land Management (BLM).

On October 16, 2017, corrosion of the threads of the steel piping at the connection to a poly flowline resulted in a release of approximately 94 barrels (bbls) of produced water on the surface of a pipeline ROW located off the edge of the northeast corner of the Site tank battery. The release caused fluid to flow across approximately 3,145 square feet of the pipeline ROW. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Notification of Release (NOR) on October 17, 2017, and subsequently submitted an Initial C-141 Application (C-141) on October 30, 2017. The release was assigned Incident Number nAB1730536457.

On November 30, 2017, a Remediation Work Plan (*2017 Work Plan*) was submitted via email to confirm the NMOCD standards based on Site ranking and proposed a sampling plan to address the release. The *2017 Work Plan* was approved via email on February 6, 2018, and is included in Appendix A.

Confirmation soil sampling was completed on February 14, 2018, in accordance with the approved *2017 Work Plan*. The soil sampling results were presented in a *Closure Request* report submitted to the NMOCD via email on June 8, 2018. The *2018 Closure Request* is included in Appendix B. Because the *Closure Request* had not been reviewed, it was included in a Compliance Agreement for Remediation for Historical Releases (*Compliance Agreement*) between XTO and the NMOCD effective November 13, 2018. The purpose of the *Compliance Agreement* was to ensure that reportable releases that occurred prior to August 14, 2018, where XTO was responsible for the corrective action, complied with

Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) as amended on August 14, 2018.

On December 24, 2025, XTO requested closure of the incident by resubmitting the 2018 *Closure Request* report to the NMOCD web portal. The *Closure Request* was denied by the NMOCD on February 5, 2026, for the following reasons:

1) *Under the Site Characterization portion of the C-141 application, to the question: "What is the minimum distance, between the closest lateral extents of the release and the following surface areas: Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)," was answered, "Between 1 and 5 (mi.)." According to the National Wetlands Inventory Mapper, a freshwater emergent wetland (also known as a playa) is located between ½ to 1 mile south of the release location. This is required to be updated within the C-141 application itself when resubmitted.*

2) *OCD records do not show approval of either a remediation plan or a remediation closure report for the release at nAB1730536457 POKER LAKE UNIT CVX JV PC #006H. SS01 and SS02 had TPH above the Closure Criteria for this site and are required to be resampled. If contamination is found, it is to be remediated pursuant to 19.15.29 NMAC. Because this release occurred over 5 years ago, delineation samples should be discrete and collected at surface, 1', 2', 3' and 4' depths and submitted to a laboratory to be tested for all Table I constituents. Collect photographic documentation during sample collection and include with next submission. If these samples are to be used for closure, a C-141N will also need to be submitted pursuant to the rule, along with a variance request per 19.15.29.14 NMAC, to use delineation samples for closure*

Based on NMOCD's response, additional delineation activities at the Site were warranted. XTO agrees that the wetland distance was incorrectly applied to the *Closure Request*, and those adjustments have been made to this *Work Plan*.

## **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 19.15.29 NMAC. Results from the characterization desktop review are presented below. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on a soil boring drilled for determination of regional groundwater depth. On September 10, 2020, a soil boring permitted by New Mexico Office of the State Engineer (NMOSE) well C-4474, located approximately 0.88 miles north of the Site was drilled utilizing a truck-mounted air rotary rig. The boring 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 left open for over 72 hours to allow for the potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater at that location is greater than 110 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record and Log is included in Appendix C.

The closest continuously flowing or significant watercourse to the Site is an intermittently flooded riverine, located approximately 3,950 feet south 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).

In order to confirm depth to groundwater is greater than 100 feet bgs at the Site, XTO proposes to advance a soil boring to a depth of 105 feet bgs. The soil boring will be located within 0.5 miles of the Site, and a field geologist will log and describe soils continuously. The soil boring will be left open for over 72 hours to allow for equilibration of groundwater levels within the temporary boring casing. After the 72-hour waiting period, depth to groundwater will be assessed and the soil boring will be backfilled following NMOSE approved procedures. A well record or soil boring log will be included in the follow-up Closure Report.

Based on the results of the current Site Characterization, and until a soil boring confirms regional depth to groundwater at the Site is greater than 100 feet bgs, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 2,500 mg/kg
- Chloride: 600 mg/kg

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

## **SITE ASSESSMENT AND DELINEATION ACTIVITIES**

On March 9, 2026, in accordance with the NMOCD's denial response, XTO requested a confirmation soil sampling variance to utilize discrete delineation soil samples as confirmation soil samples in the area of where the 2018 TPH impacts were identified in SS01 and SS02. The variance was approved by the NMOCD on the same day it was submitted.

On March 12 and March 24, 2026, delineation soil sampling was completed via hand auger in accordance with the approved variance. Two boreholes (SS01 and SS02) were advanced in the locations of where the 2018 impacts were identified. Borehole SS01 was advanced to a total depth of 12 feet bgs and SS02 was advanced to a total depth of 7 feet bgs. Discrete soil samples were collected at 0.5 feet, 1-foot bgs, then every foot until the borehole terminal depth. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Based on elevated chloride concentrations in the field screenings results in the locations of SS01 and SS02, two additional boreholes (SS03 and SS04) were advanced to 8 feet bgs and 3 feet bgs, respectively. Borehole SS04 encountered hand auger refusal at 3 feet bgs. In an effort to delineate the impacts laterally, four delineation soil samples (SS05 through SS08) were collected outside the release footprint at a depth of 0.5 feet bgs. The delineation soil samples collected in boreholes SS03 and SS04, and surface samples SS05 through SS08 were field screened as described above. The delineation boreholes and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation is included in Appendix D. Field screening results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Appendix E.

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

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for lateral delineation soil samples SS05 through SS08, indicated that all COC concentrations were compliant with the proposed Closure Criteria and reclamation requirements, confirming the lateral extent of the release. Laboratory analytical results for delineation soil samples for SS01 through SS04 indicated chloride concentrations exceeded Site Closure Criteria at depths ranging from 0.5 feet bgs up to 12 feet bgs. The only samples containing chloride concentrations in compliance with the current Closure Criteria or reclamation requirements were SS02 and SS03 collected at 0.5 feet bgs and SS04A collected at 2 feet bgs. All other COCs for all delineation soil samples were in compliance with Closure Criteria and reclamation requirements. Assuming the proposed soil boring were to confirm depth to groundwater is greater than 100 feet bgs, all delineation soil samples collected below 4 feet bgs would be in compliance with Closure Criteria. Laboratory analytical results are summarized in Table 1, and the complete laboratory analytical reports are included as Appendix F.

## PROPOSED REMEDIATION WORK PLAN

The delineation soil sampling results indicate soil containing elevated chloride concentrations exists across an estimated 1,965 square-foot area. As such, XTO proposes to complete the following remediation activities:

- A temporary soil boring will be advanced within 0.5 miles of the Site to confirm regional depth to groundwater is greater than 100 feet bgs, as described above.
  - If the soil boring indicates regional depth to groundwater is less than 100 feet bgs, depending at which depth groundwater is identified, the applicable Table I Closure Criteria standards will be applied.
  - If the soil boring indicates regional depth to groundwater is greater than 100 feet bgs, the reclamation requirement will be applied in the top 4 feet of the remediation. Below 4 feet bgs, the least stringent Table I Closure Criteria will be applied.
- XTO will excavate impacted soil to a depth of at least 4 feet bgs. Excavation will proceed until confirmation soil samples confirm all COC concentrations are compliant with the Closure Criteria as determined by the results from the depth to water boring. The proposed excavation area is presented on Figure 2.
- 5-point confirmation soil samples will be collected at a sampling frequency representing no more than 200 square feet along the floor and sidewall of the excavated area. The 5-point composite soil samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing.
- Assuming depth to groundwater is greater than 100 feet bgs, an estimated 300 cubic yards of impacted soil will be excavated to 4 feet bgs in an estimated 1,965 square-foot area, based on recent delineation analytical results. The impacted soil will be disposed of at a New Mexico approved disposal facility.

XTO Energy, Inc  
Remediation Work Plan  
Poker Lake Unit CVX JV PC #006H



- The excavation will be backfilled with locally procured material and recontoured to match pre-existing conditions and reseeded with a BLM approved seed mix.

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

Sincerely,  
**Ensolum, LLC**

A handwritten signature in black ink that reads "Ben J. Belill".

Benjamin J. Belill  
Senior Geologist

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

Tacoma Morrissey  
Associate Principal

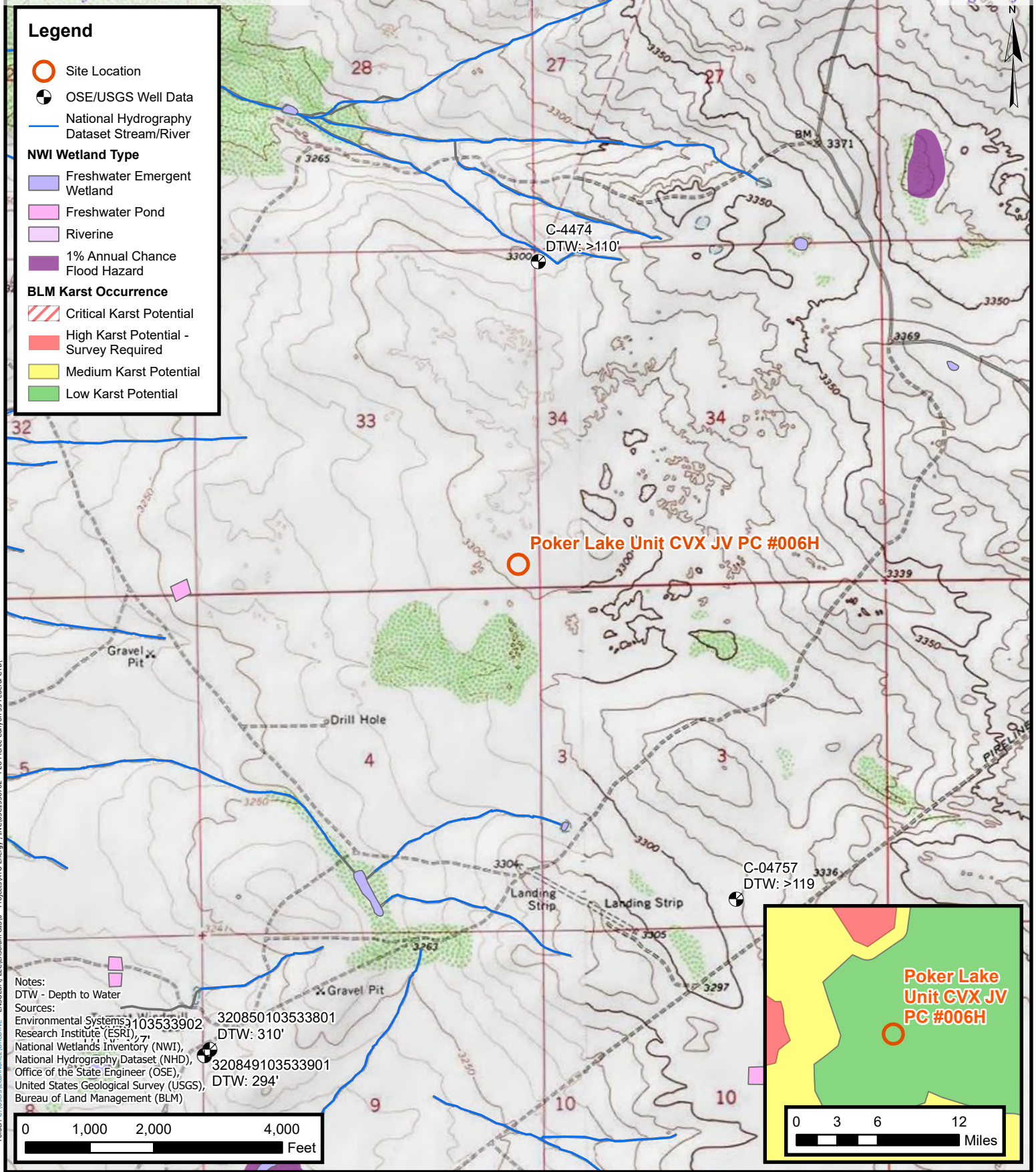
cc: Robert Woodall XTO  
Richard Kotzur, XTO  
BLM

Appendices:

Figure 1 Site Receptor Map  
Figure 2 Delineation Soil Sample Locations  
Table 1 Soil Sample Analytical Results  
Appendix A 2017 Work Plan dated November 30, 2017  
Appendix B Closure Request dated June 1, 2018  
Appendix C Referenced Well Records  
Appendix D Photographic Log  
Appendix E Lithologic / Soil Sampling Logs  
Appendix F Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES



Folder: C:\Users\Learn\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\XTO Energy, INC\0305158782 - PU Pierce Canyon 33 Federal CTB

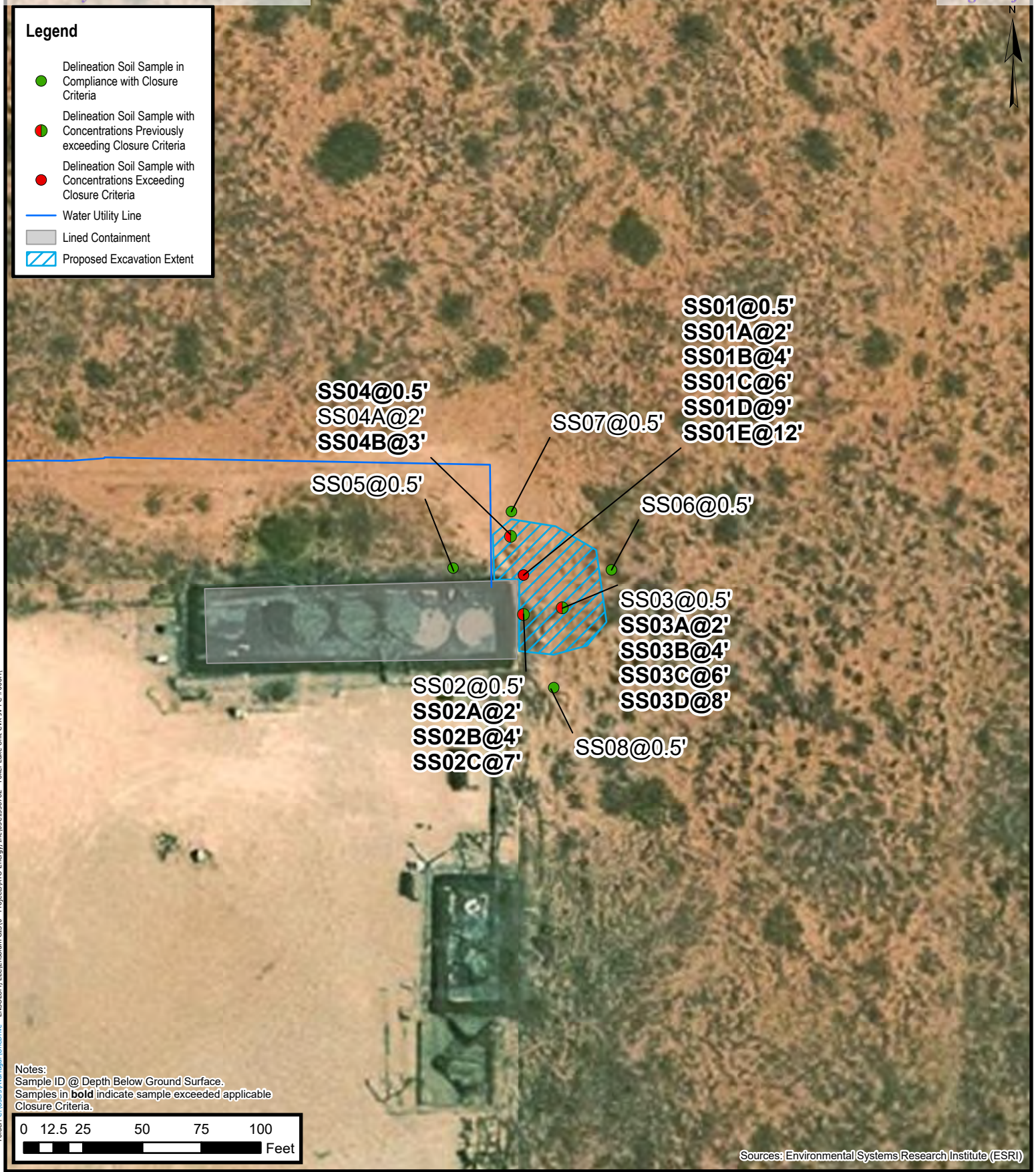


**Site Receptor Map**  
 XTO Energy, INC  
 Poker Lake Unit CVX JV PC #006H  
 Incident Number: nAB1730536457  
 Unit P, Section 33, T 24S, R 30E  
 Eddy County, New Mexico

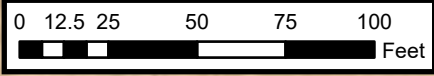
**FIGURE**  
**1**

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously exceeding Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Closure Criteria
- Water Utility Line
- Lined Containment
- Proposed Excavation Extent



Notes:  
 Sample ID @ Depth Below Ground Surface.  
 Samples in **bold** indicate sample exceeded applicable Closure Criteria.



Sources: Environmental Systems Research Institute (ESRI)



### Delineation Soil Sample Locations

XTO Energy, Inc  
 Poker Lake Unit CVX JV PC #006H  
 Incident Number: nAB1730536457  
 Unit P, Section 33, T 24S, R 30E  
 Eddy County, New Mexico

**FIGURE**  
**2**



TABLES

**TABLE 1  
SOIL SAMPLE ANALYTICAL RESULTS  
Poker Lake Unit CVX JV PC #006H  
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>NMOCOD Table I 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>										
SS01	03/12/2026	0.5	<0.050	<0.300	<10.0	10.2	<10.0	10.2	10.2	<b>1,470</b>
SS01A	03/12/2026	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<b>5,440</b>
SS01B	03/12/2026	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<b>5,200</b>
SS01C	03/12/2026	6	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<b>3,280</b>
SS01D	03/12/2026	9	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<b>1,920</b>
SS01E	03/12/2026	12	<0.050	<0.300	<10.0	10.0	<10.0	10.0	10.0	<b>832</b>
SS02	03/12/2026	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
SS02A	03/12/2026	2	<0.050	<0.300	<10.0	10.8	<10.0	10.8	10.8	<b>1,490</b>
SS02B	03/12/2026	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<b>10,300</b>
SS02C	03/12/2026	7	<0.050	<0.300	<10.0	10.0	<10.0	10.0	10.0	<b>1,330</b>
SS03	03/12/2026	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	864
SS03A	03/24/2026	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	<b>2,020</b>
SS03B	03/24/2026	4	0.00582	0.139	<49.9	<49.9	<49.9	<49.9	<49.9	<b>8,920</b>
SS03C	03/24/2026	6	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	<b>7,950</b>
SS03D	03/24/2026	8	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	<b>1,350</b>
SS04	03/12/2026	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<b>1,020</b>
SS04A	03/24/2026	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	551
SS04B	03/24/2026	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<b>2,160</b>
SS05	03/12/2026	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS06	03/12/2026	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SS07	03/12/2026	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SS08	03/24/2026	0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	38.6

Notes:

- bgs: below ground surface
- mg/kg: milligrams per kilogram
- NMOCOD: New Mexico Oil Conservation Division
- BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
- Concentrations in **bold** exceed the NMOCOD Table I Closure Criteria or reclamation requirement where applicable.
- GRO: Gasoline Range Organics
- DRO: Diesel Range Organics
- ORO: Oil Range Organics
- TPH: Total Petroleum Hydrocarbon
- NMAC: New Mexico Administrative Code



## APPENDIX A

Proposed Work Plan dated November 30, 2017

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COMPLIANCE / ENGINEERING / REMEDIATION

LT Environmental, Inc.

3300 North A Street  
Building 1, Suite 103  
Midland, Texas 79705  
432-704-5178

November 30, 2017

Ms. Crystal Weaver  
New Mexico Oil Conservation Division  
811 S. First Street  
Artesia, New Mexico 88210

**RE: Proposed Work Plan  
PLU Pierce Canyon 33 Tank Battery  
2RP-4460  
XTO Energy, Inc.  
Eddy County, New Mexico**

Dear Ms. Weaver:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), proposes the following work plan to delineate impacted soil at the PLU Pierce Canyon 33 Tank Battery (Site) in response to a release of approximately 94 barrels (bbls) of produced water from a riser on October 16, 2017. The release impacted approximately 3,000 square feet of a pipeline right-of-way. XTO recovered 50 bbls of liquids as reported to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 dated October 30, 2017. This work plan addresses residual impact to soil and is being submitted in response to the conditions of approval from the NMOCD documented on the C-141.

## **BACKGROUND**

The Site is located in the southeast quarter of the southeast quarter of Section 33 within Township 23 South and Range 29 East in Eddy County, New Mexico. The nearest permitted water well is C03716, located approximately 2.1 miles east of the Site. Depth to water is listed as 425 feet. Additionally, the groundwater potentiometric map used by NMOCD for Eddy County indicates groundwater is greater than 100 feet deep. The closest surface water to the Site is a dry arroyo located approximately 3,900 feet south of the release area. Based on these criteria, the New Mexico Oil Conservation Division (NMOCD) site ranking for remediation action levels is a 0 and the following remediation action levels apply: 10 milligrams per kilogram (mg/kg) benzene, 50 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 5,000 mg/kg total petroleum hydrocarbons (TPH). Based on depth to groundwater greater than 100 feet, LTE proposes a site-specific chloride action level of 600 mg/kg or within range ( $\pm 10\%$ ) of background concentrations.

## **PROPOSED DELINEATION**

XTO will map the impacted area based on visual observations of soil staining. To investigate soil impact, XTO will collect soil samples at the surface of the release to characterize lateral extent, then advance a borehole as necessary in the center of the impacted area to delineate the total depth



Weaver, C.  
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of impact. Boreholes may be advanced to the north, east, west, and south until lateral extent is defined. Continuous soil samples will be logged and described using the Unified Soil Classification System (USCS) to delineate potential hydrocarbon and saltwater impacts. The intervals from immediately beneath the ground surface and then every five feet thereafter will be screened for volatile aromatic hydrocarbons as well as any soil that is stained or has a hydrocarbon odor using a photo-ionization detector (PID). The soil borings will be advanced until one of three conditions are met: groundwater is encountered, auger refusal, or field screening indicates the extent of hydrocarbon soil impact is below NMOCD standards based on site ranking. All surface soil samples will be submitted to a certified laboratory for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021, TPH – gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO) by EPA Method 8015, and chloride by EPA Method 300.1. In boreholes, soil samples with the highest PID result and a bottom hole sample will be submitted for laboratory analysis. XTO will collect at least one background soil sample for analysis of chloride by EPA Method 300.1.

## REPORTING

XTO will prepare a report documenting all field activities and describing results for submittal to the NMOCD. The report will include site maps and a table of laboratory analytical results. Based on the results of the delineation, XTO will propose an appropriate remediation strategy.

## SCHEDULE

XTO will complete the delineation within four weeks of the date of approval of this work plan by NMOCD. The report will be submitted to the NMOCD within two weeks of receipt of laboratory analytical results.

LTE appreciates the opportunity to provide this proposed work plan to the NMOCD. If you have any questions or comments regarding this plan, do not hesitate to contact me at (970) 385-1096 or via email at [aager@ltenv.com](mailto:aager@ltenv.com) or Kyle Littrell at XTO at (970) 317-1867 or [Kyle\\_Littrell@xtoenergy.com](mailto:Kyle_Littrell@xtoenergy.com).

Sincerely,  
LT ENVIRONMENTAL, INC.

A handwritten signature in black ink that reads "Ashley L. Ager". The signature is written in a cursive, flowing style.

Ashley L. Ager, M.S., P.G.  
Senior Geologist

Cc: Kyle Littrell, XTO



## APPENDIX B

*Closure Request* dated June 1, 2018

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LT Environmental, Inc.

3300 North A Street, Building 1, #103  
Midland, Texas 79705  
T 432.704.5178 / F 432.704.5179

June 8, 2018

Mr. Mike Bratcher  
New Mexico Oil Conservation Division  
811 South First Street  
Artesia, New Mexico 88210

**RE: Closure Request  
Pierce Canyon 33 Battery  
Remediation Permit Number 2RP-4460  
Eddy County, New Mexico**

Dear Mr. Bratcher;

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following letter report detailing soil sampling activities at the Pierce Canyon 33 Battery (Site), which is located at the Poker Lake Unit CVX JV PC 006H well pad, in Unit P of Section 33, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the investigation was to assess impacts to soil after the threads of the steel piping became corroded at the connection to a poly flowline located on the northeastern end of the storage tank containment and caused a release of approximately 94 barrels (bbls) of produced water. The line was flushed with fresh water, drained, isolated, and repaired. The release occurred on October 16, 2017, and impacted approximately 3,145 square feet of pipeline right-of-way (ROW) immediately adjacent to the northeast corner of the tank battery. Free-standing liquid was removed with a vacuum truck; approximately 50 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on October 30, 2017, and was assigned Remediation Permit Number (RP) 2RP-4460 (Attachment 1). The original latitude and longitude provided on the C-141 was incorrect and is updated on the final C-141. On November 30, 2017, XTO submitted a Proposed Work Plan for delineation at the Site. The work plan was approved by NMOCD and Bureau of Land Management (BLM). The sampling was conducted to assess current site conditions and delineate potential impact to soil. Based on the results of the sampling event as described herein, XTO is requesting no further action for this release.

## **BACKGROUND**

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well is C 03716, located approximately 2.07 miles east of the Site, with a depth to groundwater of 425 feet bgs and a total depth of 600 feet bgs. The closest surface water to the Site is a dry arroyo located approximately 3,900 feet south of the release area. The Site is greater than 1,000 feet from a water source and greater than 200 feet from a private domestic water source. Based on these criteria, the NMOCD site ranking for remediation action levels is 0, and the





Bratcher, M

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following remediation action levels apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX); and 5,000 mg/kg total petroleum hydrocarbons (TPH). Based on standard practice in this region, LTE proposes a site-specific chloride action level of 600 mg/kg or within 10 percent (%) of the background concentration.

## SOIL SAMPLING

Soil sample locations were based on visual inspection of the Site and the Form C-141 information. The release occurred within a pipeline right-of-way where a poly flowline connected to a steel pipeline immediately adjacent to the northeast corner of the tank battery surface. The replaced section of pipeline was observed to have been exposed by hand excavation. LTE collected five soil samples within the pipeline right-of-way near the repaired pipeline on February 14, 2018 as depicted on Figure 2. LTE made an effort to collect representative samples at the release source (SS01 was collected beneath the repaired pipeline) and areas potentially affected by the release. No soil staining was observed.

To eliminate the effects from weathering and natural degradation of contaminants at the ground surface, subsurface samples were collected from each location from approximately 0.5 feet to 1-foot bgs by hand auger. The soil samples were collected and placed directly into pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis, and immediately placed on ice. The samples were hand delivered to a laboratory courier at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

## ANALYTICAL RESULTS

Laboratory analytical results for the five soil samples indicated BTEX concentrations were below laboratory reporting limits. Laboratory analytical results for TPH indicated concentrations did not exceed the NMOCD remediation action levels for the Site with values ranging from below the laboratory reporting limit (SS03, SS04, and SS05) to 510 mg/kg in soil sample SS01. Chloride concentrations ranged from below the laboratory reporting limit (SS03, SS04, and SS05) to 110 mg/kg in soil sample SS01. Laboratory analytical results are presented on Figure 2 and in Table 1, and the complete laboratory analytical report is included as Attachment 2.

## CONCLUSIONS

Laboratory analytical results for soil samples collected within the former release footprint indicate impact to soil, as defined by concentrations of BTEX, TPH, and chloride, do not exceed NMOCD site-specific remediation action levels. Initial response efforts have remediated this Site, and XTO





Bratcher, M  
Page 3

requests no further action for this release. The Final NMOCD Form C-141 is included as Attachment 1.

If you have any questions or comments, please do not hesitate to contact Adrian Baker at (432) 887-1255 or [abaker@ltenv.com](mailto:abaker@ltenv.com).

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in blue ink that reads "Adrian Baker".

Adrian Baker  
Project Geologist

A handwritten signature in blue ink that reads "Ashley L. Ager".

Ashley L. Ager, M.S.,P.G.  
Senior Geologist

cc: Kyle Littrell, XTO  
Crystal Weaver, NMOCD  
Jim Amos, BLM  
Shelly Tucker, BLM

Attachments:

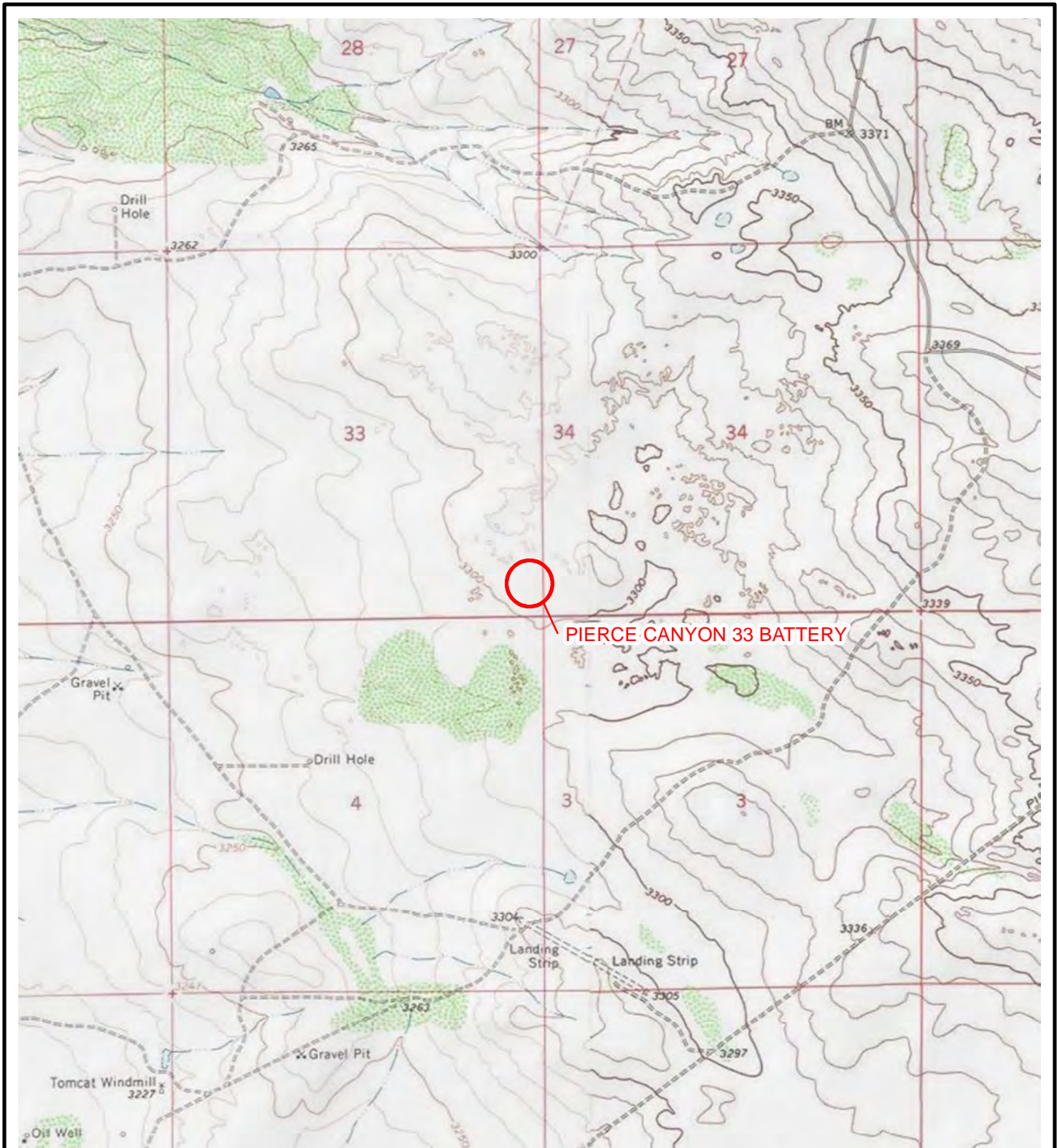
Figure 1 Site Location Map  
Figure 2 Soil Sample Locations  
Table 1 Soil Analytical Results  
Attachment 1 Initial/Final NMOCD Form C-141  
Attachment 2 Laboratory Analytical Report



**FIGURES**



*Advancing Opportunity*

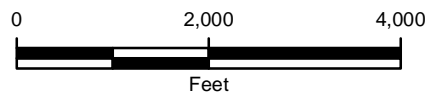


PIERCE CANYON 33 BATTERY

**LEGEND**

○ SITE LOCATION

IMAGE COURTESY OF ESRI/USGS

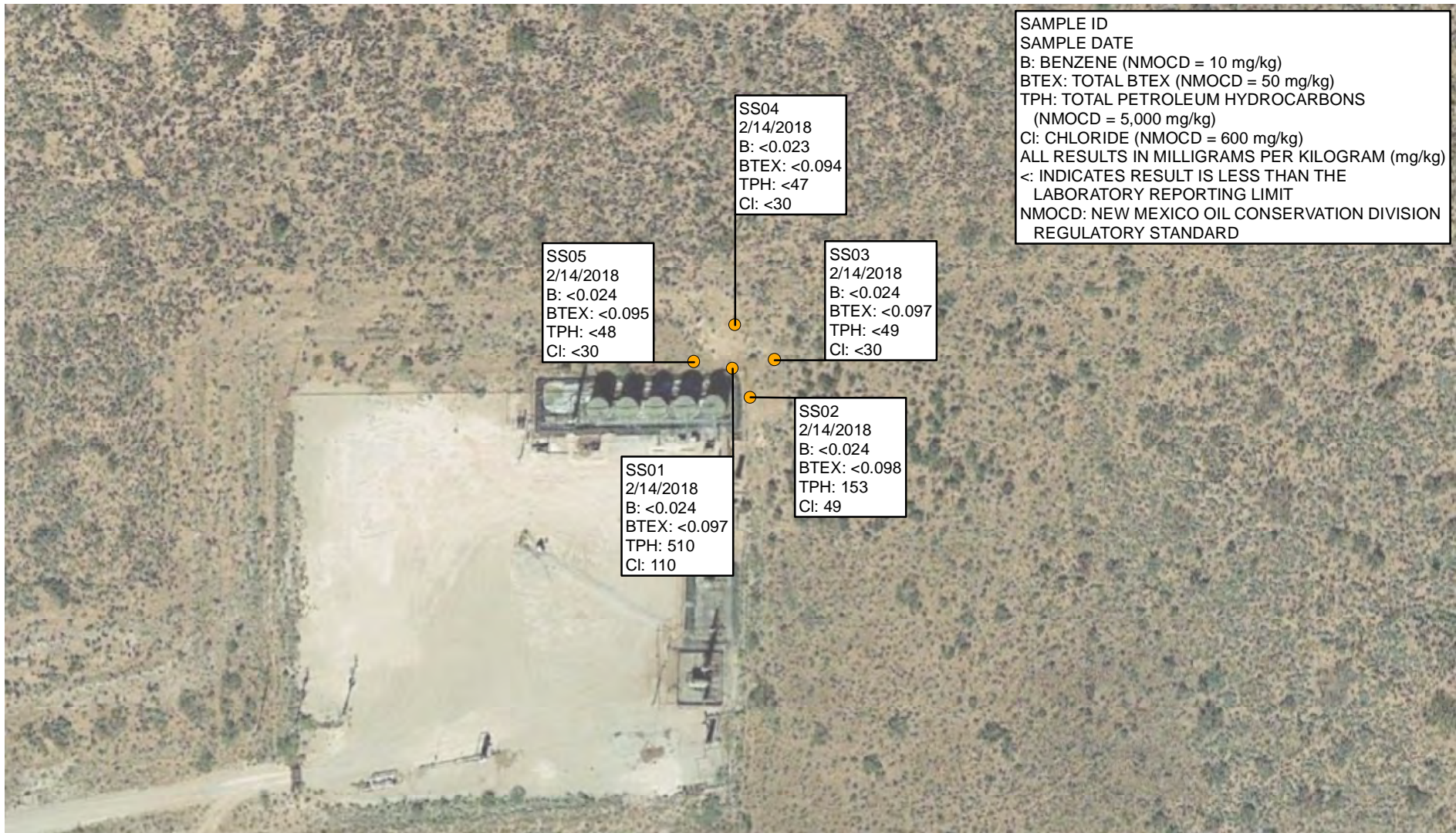


NOTE: REMEDIATION PERMIT NUMBER 2RP-4460

**FIGURE 1**  
**SITE LOCATION MAP**  
**PIERCE CANYON 33 BATTERY**  
**SESE SEC 33 T24S R30E**  
**EDDY COUNTY, NEW MEXICO**  
**XTO ENERGY, INC.**



P:\XTO Energy\GIS\MXD\012917042\_PLU PIERCE CANYON 33\_FEDERAL CTR\012917042\_FIG01\_SL\_2018.mxd

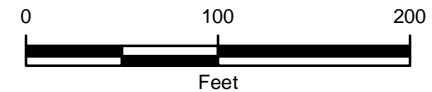


**SAMPLE ID**  
**SAMPLE DATE**  
 B: BENZENE (NMOCD = 10 mg/kg)  
 BTEX: TOTAL BTEX (NMOCD = 50 mg/kg)  
 TPH: TOTAL PETROLEUM HYDROCARBONS (NMOCD = 5,000 mg/kg)  
 Cl: CHLORIDE (NMOCD = 600 mg/kg)  
 ALL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)  
 <: INDICATES RESULT IS LESS THAN THE LABORATORY REPORTING LIMIT  
 NMOCD: NEW MEXICO OIL CONSERVATION DIVISION REGULATORY STANDARD

**LEGEND**

● SOIL SAMPLE

IMAGE COURTESY OF GOOGLE EARTH 2017



NOTE: REMEDIATION PERMIT NUMBER 2RP-4460

**FIGURE 2**  
**SOIL SAMPLE LOCATIONS**  
**PIERCE CANYON 33 BATTERY**  
**SESE SEC 33 T24S R30E**  
**EDDY COUNTY, NEW MEXICO**  
**XTO ENERGY, INC.**



TABLE



Advancing Opportunity

**TABLE 1  
SOIL ANALYTICAL RESULTS  
PIERCE CANYON 33 BATTERY  
REMEDIATION PERMIT NUMBER 2RP-4460  
EDDY COUNTY, NEW MEXICO  
XTO ENERGY, INC.**

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 Gasoline Range Organics (mg/kg)	C10-C28 Diesel Range Organics (mg/kg)	C28-40 Motor Oil Range Organics (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0-1	2/14/2018	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	160	350	510	110
SS02	0-1	2/14/2018	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	33	120	153	49
SS03	0-1	2/14/2018	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.8	<49	<49	<30
SS04	0-1	2/14/2018	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.4	<47	<47	<30
SS05	0-1	2/14/2018	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.6	<48	<48	<30
NMOCD Remediation Action Levels			10	NE	NE	NE	50	NE	NE	NE	5,000	600

**Notes:**

- bgs - below ground surface
- BTEX - benzene, toluene, ethylbenzene, and total xylenes
- mg/kg - milligrams per kilogram
- NE - not established
- NMOCD - New Mexico Oil Conservation Division
- TPH - total petroleum hydrocarbons
- < - indicates result is below laboratory reporting limits



ATTACHMENT 1  
INITIAL/FINAL NMOCD FORM C-141



Advancing Opportunity

**NM OIL CONSERVATION**

ARTESIA DISTRICT

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

OCT 30 2017

Form C-141  
Revised August 8, 2011

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

RECEIVED to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

*NAB1730536457* (*BOPCD*) OPERATOR  Initial Report  Final Report  
*260737*  
 Name of Company: XTO Energy Contact: Amy Ruth  
 Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220 Telephone No. 575-887-7329  
 Facility Name: Pierce Canyon 33 Battery (PLU CVX JV PC 006H) Facility Type: Exploration and Production  
 Surface Owner: Federal Mineral Owner: Federal API No. 30-015-36636

**LOCATION OF RELEASE**

Unit Letter <i>E</i>	Section 33	Township 24S	Range 30E	Feet from the 350	North/South Line South	Feet from the 350	East/West Line East	County Eddy
Latitude <del>32.298632°</del> <sup>32.1679916</sup>				Longitude <del>-103.938861°</del> <sup>-103.8785706</sup>				

**NATURE OF RELEASE**

Type of Release Produced water	Volume of Release 94 bbl	Volume Recovered 50 bbls
Source of Release Riser	Date and Hour of Occurrence 10/16/2017, time unknown	Date and Hour of Discovery 10/16/2017, 3:30 P.M.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher and Crystal Weaver (ENMRD), Jim Amos and Shelly Tucker (BLM)	
By Whom? Amy Ruth	Date and Hour 10/17/2017, 8:30 A.M.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* The threads of the steel piping became corroded within the connection to poly line. The line was flushed with fresh water, drained, and isolated until repairs can be made.		
Describe Area Affected and Cleanup Action Taken.* The spill affected approximately 3,145 square feet of pipeline ROW near a lease road. A vacuum truck recovered free standing fluids.		

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Amy C. Ruth	Approved by Environmental Specialist <i>Mike Bratcher</i>	
Title: Environmental Coordinator	Approval Date: 10/31/17	Expiration Date: N/A
E-mail Address: Amy.Ruth@xtoenergy.com	Conditions of Approval: <i>See attached</i>	Attached <i>FRP-4460</i>
Date: 10/30/2017 Phone: 432-661-0571		

\* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 10/30/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4410 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

*The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]*

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 11/30/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

**Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.**

**Jim Griswold**

OCD Environmental Bureau Chief

1220 South St. Francis Drive

Santa Fe, New Mexico 87505

505-476-3465

jim.griswold@state.nm.us

**Bratcher, Mike, EMNRD**

---

**From:** Ruth, Amy <Amy\_Ruth@xtoenergy.com>  
**Sent:** Monday, October 30, 2017 3:57 PM  
**To:** Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; jamos@blm.gov; Tucker, Shelly  
**Cc:** Littrell, Kyle; Foust, Bryan  
**Subject:** RE: Release Notification - PLU Pierce Canyon 33 Fed CTB 10-16-17  
**Attachments:** Initial C-141 PLU PC 33 Battery 10-16-17.pdf

Good Afternoon,

Please find the initial form C-141 for the referenced location/event. As always, thank you for your help and call anytime with questions.

Respectfully,

*Amy C. Ruth*

Delaware Basin Division  
Environmental Coordinator  
3104 E. Greene Street | Carlsbad, NM 88220 | M: 432.661.0571 | O: 575.887.7329



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---

**From:** Ruth, Amy  
**Sent:** Tuesday, October 17, 2017 8:34 AM  
**To:** 'Bratcher, Mike, EMNRD'; Weaver, Crystal, EMNRD; jamos@blm.gov; Tucker, Shelly  
**Cc:** McSpadden, Wes; Sanders, Toady; Foust, Bryan; Fuqua, Danny  
**Subject:** Release Notification - PLU Pierce Canyon 33 Fed CTB 10-16-17

All,

This is sent as notification of a release discovered yesterday afternoon at about 3:30 pm in association with and in the vicinity of the referenced battery at the API for Poker Lake Unit CVX JV PC #006H 30-015-247392 of a volume in excess of 25 barrels produced water from the SWD system. We will update you on total volumes with the submission of an initial C-141 as soon as possible. Please call me with questions/concerns.

Respectfully,

*Amy C. Ruth*

Delaware Basin Division  
Environmental Coordinator  
3104 E. Greene Street | Carlsbad, NM 88220 | M: 432.661.0571 | O: 575.887.7329

**Bratcher, Mike, EMNRD**

---

**From:** Ruth, Amy <Amy\_Ruth@xtoenergy.com>  
**Sent:** Tuesday, October 17, 2017 8:34 AM  
**To:** Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; jamos@blm.gov; Tucker, Shelly  
**Cc:** McSpadden, Wes; Sanders, Toady; Foust, Bryan; Fuqua, Danny  
**Subject:** Release Notification - PLU Pierce Canyon 33 Fed CTB 10-16-17

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Respectfully,

*Amy C. Ruth*

Delaware Basin Division

Environmental Coordinator

3104 E. Greene Street | Carlsbad, NM 88220 | M: 432.661.0571 | O: 575.887.7329



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District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141  
Revised April 3, 2017  
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**  Initial Report  Final Report

Name of Company XTO Energy	Contact: Kyle Littrell
Address 3104 E Greene Street, Carlsbad, NM 88220	Telephone No: 432-221-7331
Facility Name: Pierce Canyon 33 Battery (PLU CVX JV PC 006H)	Facility Type: Exploration and Production

Surface Owner Federal	Mineral Owner: Federal	API No. 30-015-36636
-----------------------	------------------------	----------------------

**LOCATION OF RELEASE**

Unit Letter P	Section 33	Township 24S	Range 30E	Feet from the 350	North/South Line South	Feet from the 350	East/West Line East	County Eddy
------------------	---------------	-----------------	--------------	----------------------	---------------------------	----------------------	------------------------	----------------

Latitude 32.168284 Longitude -103.878129NAD83

**NATURE OF RELEASE**

Type of Release Produced water	Volume of Release 94 bbls	Volume Recovered 50 bbls
Source of Release: Riser	Date and Hour of Occurrence 10/16/2018, time unknown	Date and Hour of Discovery 10/16/2018, 3:30 P.M.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher and Crystal Weaver, Jim Amos and Shelly Tucker (BLM)	
By Whom? Amy Ruth	Date and Hour: 10/17/2017, 8:30 A.M.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		

Describe Cause of Problem and Remedial Action Taken.\*  
The threads of the steel piping became corroded within the connection to poly line. The line was flushed with fresh water, drained, isolated until repairs could be made.

Describe Area Affected and Cleanup Action Taken.\*  
The spill area affected approximately 3,145 square feet of pipeline ROW near a lease road. A vacuum truck recovered free standing fluids.

LTE collected five soil samples on February 14, 2018. Laboratory analytical results from soil samples collected within the release footprint indicate concentrations of BTEX, TPH, and chloride do not exceed NMOCD remediation standards. Initial response efforts have remediated this Site and XTO requests no further action at the Site.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Kyle Littrell	Approved by Environmental Specialist:	
Title: SH&E Coordinator	Approval Date:	Expiration Date:
E-mail Address: Kyle_Littrell@xtoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 6/8/2018 Phone: 432-221-7331		

\* Attach Additional Sheets If Necessary

ATTACHMENT 2  
LABORATORY ANALYTICAL REPORT



Advancing Opportunity



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

February 27, 2018

Kyle Littrell

LTE

3300 N A St Bldg 1 #103

Midland, TX 79705

TEL: (432) 704-5178

FAX

RE: PLU Pierce Canyon 33 Federal

OrderNo.: 1802A38

Dear Kyle Littrell:

Hall Environmental Analysis Laboratory received 5 sample(s) on 2/17/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**

Lab Order **1802A38**

Date Reported: 2/27/2018

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** LTE

**Client Sample ID:** SS01

**Project:** PLU Pierce Canyon 33 Federal

**Collection Date:** 2/14/2018 3:00:00 PM

**Lab ID:** 1802A38-001

**Matrix:** SOIL

**Received Date:** 2/17/2018 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	160	9.8		mg/Kg	1	2/22/2018 11:15:56 AM
Motor Oil Range Organics (MRO)	350	49		mg/Kg	1	2/22/2018 11:15:56 AM
Surr: DNOP	106	70-130		%Rec	1	2/22/2018 11:15:56 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/22/2018 11:44:08 AM
Surr: BFB	86.5	15-316		%Rec	1	2/22/2018 11:44:08 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	2/22/2018 11:44:08 AM
Toluene	ND	0.049		mg/Kg	1	2/22/2018 11:44:08 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/22/2018 11:44:08 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/22/2018 11:44:08 AM
Surr: 4-Bromofluorobenzene	85.5	80-120		%Rec	1	2/22/2018 11:44:08 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	110	30		mg/Kg	20	2/24/2018 1:23:42 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1802A38**

Date Reported: 2/27/2018

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** LTE

**Client Sample ID:** SS02

**Project:** PLU Pierce Canyon 33 Federal

**Collection Date:** 2/14/2018 3:05:00 PM

**Lab ID:** 1802A38-002

**Matrix:** SOIL

**Received Date:** 2/17/2018 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	33	9.5		mg/Kg	1	2/22/2018 11:40:15 AM
Motor Oil Range Organics (MRO)	120	47		mg/Kg	1	2/22/2018 11:40:15 AM
Surr: DNOP	98.2	70-130		%Rec	1	2/22/2018 11:40:15 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/22/2018 12:54:33 PM
Surr: BFB	87.2	15-316		%Rec	1	2/22/2018 12:54:33 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	2/22/2018 12:54:33 PM
Toluene	ND	0.049		mg/Kg	1	2/22/2018 12:54:33 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/22/2018 12:54:33 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/22/2018 12:54:33 PM
Surr: 4-Bromofluorobenzene	85.2	80-120		%Rec	1	2/22/2018 12:54:33 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	49	30		mg/Kg	20	2/24/2018 1:36:06 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1802A38**

Date Reported: 2/27/2018

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** LTE

**Client Sample ID:** SS03

**Project:** PLU Pierce Canyon 33 Federal

**Collection Date:** 2/14/2018 3:10:00 PM

**Lab ID:** 1802A38-003

**Matrix:** SOIL

**Received Date:** 2/17/2018 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/22/2018 12:04:43 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/22/2018 12:04:43 PM
Surr: DNOP	89.7	70-130		%Rec	1	2/22/2018 12:04:43 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/22/2018 1:17:56 PM
Surr: BFB	89.0	15-316		%Rec	1	2/22/2018 1:17:56 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	2/22/2018 1:17:56 PM
Toluene	ND	0.049		mg/Kg	1	2/22/2018 1:17:56 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/22/2018 1:17:56 PM
Xylenes, Total	ND	0.097		mg/Kg	1	2/22/2018 1:17:56 PM
Surr: 4-Bromofluorobenzene	87.0	80-120		%Rec	1	2/22/2018 1:17:56 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	2/24/2018 2:13:20 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1802A38**

Date Reported: 2/27/2018

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** LTE

**Client Sample ID:** SS04

**Project:** PLU Pierce Canyon 33 Federal

**Collection Date:** 2/14/2018 3:15:00 PM

**Lab ID:** 1802A38-004

**Matrix:** SOIL

**Received Date:** 2/17/2018 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/22/2018 12:29:08 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/22/2018 12:29:08 PM
Surr: DNOP	89.9	70-130		%Rec	1	2/22/2018 12:29:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/22/2018 1:41:45 PM
Surr: BFB	93.9	15-316		%Rec	1	2/22/2018 1:41:45 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	2/22/2018 1:41:45 PM
Toluene	ND	0.047		mg/Kg	1	2/22/2018 1:41:45 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/22/2018 1:41:45 PM
Xylenes, Total	ND	0.094		mg/Kg	1	2/22/2018 1:41:45 PM
Surr: 4-Bromofluorobenzene	92.9	80-120		%Rec	1	2/22/2018 1:41:45 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	2/24/2018 2:25:45 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1802A38

Date Reported: 2/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS05

Project: PLU Pierce Canyon 33 Federal

Collection Date: 2/14/2018 3:20:00 PM

Lab ID: 1802A38-005

Matrix: SOIL

Received Date: 2/17/2018 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/22/2018 12:53:19 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/22/2018 12:53:19 PM
Surr: DNOP	91.6	70-130		%Rec	1	2/22/2018 12:53:19 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/22/2018 2:05:12 PM
Surr: BFB	93.1	15-316		%Rec	1	2/22/2018 2:05:12 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	2/22/2018 2:05:12 PM
Toluene	ND	0.047		mg/Kg	1	2/22/2018 2:05:12 PM
Ethylbenzene	ND	0.047		mg/Kg	1	2/22/2018 2:05:12 PM
Xylenes, Total	ND	0.095		mg/Kg	1	2/22/2018 2:05:12 PM
Surr: 4-Bromofluorobenzene	93.0	80-120		%Rec	1	2/22/2018 2:05:12 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/24/2018 2:38:10 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1802A38

27-Feb-18

**Client:** LTE  
**Project:** PLU Pierce Canyon 33 Federal

Sample ID <b>MB-36703</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>36703</b>		RunNo: <b>49346</b>							
Prep Date: <b>2/23/2018</b>	Analysis Date: <b>2/24/2018</b>		SeqNo: <b>1594260</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID <b>LCS-36703</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>36703</b>		RunNo: <b>49346</b>							
Prep Date: <b>2/23/2018</b>	Analysis Date: <b>2/24/2018</b>		SeqNo: <b>1594261</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.7	90	110			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1802A38

27-Feb-18

**Client:** LTE  
**Project:** PLU Pierce Canyon 33 Federal

Sample ID <b>LCS-36648</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>36648</b>		RunNo: <b>49309</b>							
Prep Date: <b>2/21/2018</b>	Analysis Date: <b>2/22/2018</b>		SeqNo: <b>1591479</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.9	70	130			
Surr: DNOP	3.8		5.000		77.0	70	130			

Sample ID <b>MB-36648</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>36648</b>		RunNo: <b>49309</b>							
Prep Date: <b>2/21/2018</b>	Analysis Date: <b>2/22/2018</b>		SeqNo: <b>1591480</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.1		10.00		81.0	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1802A38

27-Feb-18

**Client:** LTE  
**Project:** PLU Pierce Canyon 33 Federal

Sample ID <b>MB-36646</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>36646</b>		RunNo: <b>49333</b>							
Prep Date: <b>2/21/2018</b>	Analysis Date: <b>2/22/2018</b>		SeqNo: <b>1592580</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		92.8	15	316			

Sample ID <b>LCS-36646</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>36646</b>		RunNo: <b>49333</b>							
Prep Date: <b>2/21/2018</b>	Analysis Date: <b>2/22/2018</b>		SeqNo: <b>1592581</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	75.9	131			
Surr: BFB	1000		1000		105	15	316			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1802A38

27-Feb-18

**Client:** LTE  
**Project:** PLU Pierce Canyon 33 Federal

Sample ID <b>MB-36646</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>36646</b>		RunNo: <b>49333</b>							
Prep Date: <b>2/21/2018</b>	Analysis Date: <b>2/22/2018</b>		SeqNo: <b>1592604</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		91.9	80	120			

Sample ID <b>LCS-36646</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>36646</b>		RunNo: <b>49333</b>							
Prep Date: <b>2/21/2018</b>	Analysis Date: <b>2/22/2018</b>		SeqNo: <b>1592605</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	105	77.3	128			
Toluene	1.0	0.050	1.000	0	104	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	105	80.7	127			
Xylenes, Total	3.2	0.10	3.000	0	106	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.2	80	120			

Sample ID <b>1802A38-001AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>SS01</b>	Batch ID: <b>36646</b>		RunNo: <b>49333</b>							
Prep Date: <b>2/21/2018</b>	Analysis Date: <b>2/22/2018</b>		SeqNo: <b>1592607</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9862	0	103	80.9	132			
Toluene	1.0	0.049	0.9862	0.01041	104	79.8	136			
Ethylbenzene	1.0	0.049	0.9862	0	104	79.4	140			
Xylenes, Total	3.2	0.099	2.959	0	107	78.5	142			
Surr: 4-Bromofluorobenzene	0.84		0.9862		85.1	80	120			

Sample ID <b>1802A38-001AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>SS01</b>	Batch ID: <b>36646</b>		RunNo: <b>49333</b>							
Prep Date: <b>2/21/2018</b>	Analysis Date: <b>2/22/2018</b>		SeqNo: <b>1592608</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9718	0	108	80.9	132	3.75	20	
Toluene	1.1	0.049	0.9718	0.01041	108	79.8	136	2.14	20	
Ethylbenzene	1.1	0.049	0.9718	0	110	79.4	140	3.76	20	
Xylenes, Total	3.3	0.097	2.915	0	112	78.5	142	3.75	20	
Surr: 4-Bromofluorobenzene	0.86		0.9718		88.9	80	120	0	0	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

### Sample Log-In Check List

Client Name: LTE MIDLAND

Work Order Number: 1802A38

RcptNo: 1

Received By: Ashley Gallegos 2/17/2018 10:00:00 AM

Completed By: Ashley Gallegos 2/19/2018 3:41:47 PM

Reviewed By: *[Signature]* 02/19/18 Labeled by: *[Signature]* see 02/19/18

#### Chain of Custody

- 1. Is Chain of Custody complete? Yes  No  Not Present
- 2. How was the sample delivered? Courier

#### Log In

- 3. Was an attempt made to cool the samples? Yes  No  NA
- 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 5. Sample(s) in proper container(s)? Yes  No
- 6. Sufficient sample volume for indicated test(s)? Yes  No
- 7. Are samples (except VOA and ONG) properly preserved? Yes  No
- 8. Was preservative added to bottles? Yes  No  NA
- 9. VOA vials have zero headspace? Yes  No  No VOA Vials
- 10. Were any sample containers received broken? Yes  No
- 11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
- 12. Are matrices correctly identified on Chain of Custody? Yes  No
- 13. Is it clear what analyses were requested? Yes  No
- 14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: \_\_\_\_\_  
(<2 or >12 unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

#### Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
Regarding: \_\_\_\_\_  
Client Instructions: \_\_\_\_\_

16. Additional remarks:

#### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			

### Chain-of-Custody Record

Client: LTE Permian

Mailing Address: 3300 N A St.  
Midland TX 79705

Phone #: 432-701-5178

email or Fax#: Abaker@ltenv.com

QA/QC Package:  
 Standard  Level 4 (Full Validation)

Accreditation:  
 NELAP  Other  
 EDD (Type) poly

Turn-Around Time:  
 Standard  Rush

Project Name:  
PLU Pierce Canyon 33 Federal

Project #:  
30-015-36636

Project Manager:  
XTO - Kyle Littrell

Sampler: D Burns 7015704727

On Ice:  Yes  No

Sample Temperature: 1.2+0.1=2.0

Container Type and #  
1-4oz cool

Preservative Type  
HEAL No. 1802438

HEAL No. -001  
-002  
-003  
-004  
-005

### HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975 Fax 505-345-4107

#### Analysis Request

<input checked="" type="checkbox"/> BTEX + MTBE + TMBs (6021)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> BTEX + MTBE + TPH (Gas only)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> TPH Method 8015B (Gas/Diesel)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> TPH (Method 418.1)	<input checked="" type="checkbox"/>
<input type="checkbox"/> EDB (Method 504.1)	<input type="checkbox"/>
<input type="checkbox"/> 8310 (PNA or PAH)	<input type="checkbox"/>
<input type="checkbox"/> RCRA 8 Metals	<input type="checkbox"/>
<input type="checkbox"/> Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	<input type="checkbox"/>
<input type="checkbox"/> B081 Pesticides / B082 PCB's	<input type="checkbox"/>
<input type="checkbox"/> B260B (VOA)	<input type="checkbox"/>
<input type="checkbox"/> B270 (Semi-VOA)	<input checked="" type="checkbox"/>
<input type="checkbox"/> Air Bubbles (Y or N)	<input type="checkbox"/>

Date: 2/16/18 Time: 1330 Relinquished by: [Signature]

Date: 2/16/18 Time: 1330 Received by: [Signature]

Date: 2/16/18 Time: 1900 Relinquished by: [Signature]

Date: 02/17/18 Time: 10:00 Received by: [Signature]

Remarks:  
API: 30-015-36636  
ZRP-4460

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



## APPENDIX C

### Referenced Well Records

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35E 07 007 E 2020 #3104



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NO. (WELL NO.) <b>POD1 (BH-01)</b>		WELL TAG ID NO. n/a		OSE FILE NO(S). <b>C-4474</b>			
	WELL OWNER NAME(S) <b>XTO Energy (Kyle Littrell)</b>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <b>6401 Holiday Hill Dr.</b>				CITY <b>Midland</b>	STATE <b>TX</b>	ZIP <b>79707</b>	
	WELL LOCATION (FROM GPS)	LATITUDE	DEGREES <b>32°</b>	MINUTES <b>10'</b>	SECONDS <b>51.44"</b>	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE	<b>-103°</b>	<b>52'</b>	<b>38.65"</b>	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
<b>2. DRILLING &amp; CASING INFORMATION</b>	LICENSE NO. <b>1249</b>		NAME OF LICENSED DRILLER <b>Jackie D. Atkins</b>			NAME OF WELL DRILLING COMPANY <b>Atkins Engineering Associates, Inc.</b>		
	DRILLING STARTED <b>09/10/20</b>	DRILLING ENDED <b>09/10/20</b>	DEPTH OF COMPLETED WELL (FT) <b>temporary well material</b>	BORE HOLE DEPTH (FT) <b>110</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>n/a</b>			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>n/a</b>			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY: <b>Hollow Stem Auger</b>							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	<b>0</b>	<b>48</b>	<b>±8.5</b>	<b>Boring- HSA</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
	<b>48</b>	<b>110</b>	<b>±4.5</b>	<b>Boring- Air Rotary</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>3. ANNULAR MATERIAL</b>	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/17)			
FILE NO.	<b>C-4474</b>	POD NO.	<b>1</b>	TRN NO.	<b>077910</b>
LOCATION	<b>245. 30E. 34.111</b>		WELL TAG ID NO.	<b>---</b>	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO				
	0	30	30	Sand, Medium , poorly-graded with silt, no plasticity, Red-Brown	Y ✓ N	
	30	45	15	Clayey Sand, Medium, low plasticity, Dark Red-Brown	Y ✓ N	
	45	50	5	Sand, Medium , poorly-graded, compacted, no plasticity, Brown	Y ✓ N	
	50	58	8	Caliche, well cemented with medium sand matrix. Brown	Y ✓ N	
	58	73	15	Clayey Sand, Medium, Moderate plasticity, increasing clay, Brown	Y ✓ N	
	73	78	5	Caliche, with Sandy clay layering, mod plasticity, poorly-graded sand, White	Y ✓ N	
	78	83	5	Sand, Medium , poorly-graded, no plasticity, Light Brown	Y ✓ N	
	83	88	5	Clayey Sand, Medium, Moderate plasticity, decreasing clay, Red Brown	Y ✓ N	
	88	110	22	Sand, Fine , poorly-graded, no plasticity , Brown	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
		MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from LTE on-site geologist.
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
		<p><i>Jackie D. Atkins</i></p> <p>Jackie D. Atkins</p> <p>_____ SIGNATURE OF DRILLER / PRINT SIGNEE NAME</p>

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)	
FILE NO. <b>C-4474</b>	POD NO. <b>1</b>	TRN NO. <b>677410</b>	
LOCATION <b>245.30E.34.111</b>	WELL TAG ID NO. <b>—</b>	PAGE 2 OF 2	






# 2020-10-05\_C-4474POD1\_OSE\_Well Record and Log-forsign

Final Audit Report

2020-10-07

Created:	2020-10-07
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAEYXgwwt48YpaHuiUB0eJVri0E9M1MV9m

## "2020-10-05\_C-4474POD1\_OSE\_Well Record and Log-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2020-10-07 - 4:31:15 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2020-10-07 - 4:32:21 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2020-10-07 - 4:34:37 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2020-10-07 - 4:36:23 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Agreement completed.  
2020-10-07 - 4:36:23 PM GMT





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

10/07/2020

10/07/2020 8:22:59 AM

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-4474 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4474 Pod1.

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton". The signature is written in a cursive style.

Lucas Middleton

Enclosures: as noted above





APPENDIX B  
Photographic Log

---



# Photographic Log



XTO Energy, Inc  
Poker Lake Unit CVX JV PC #006H  
nAB1730536457

<p><u>Photograph</u> 1</p>	<p><u>Date</u> 3/11/2026</p>	<p>Date &amp; Time: Wed, Mar 11, 2026 at 10:56:55 MDT            Position: +032.168314° / -103.878101° (±36.3ft)            Altitude: 3316ft (±29.0ft)            Datum: WGS-84            Azimuth/Bearing: 230° S50W 4089mils True (±11°)            Ensolum</p> 
<p><u>Description</u> Assessment sampling activities; near SS01</p>		
<p><u>View</u> Southwest</p>		
<p><u>Photograph</u> 2</p>	<p><u>Date</u> 3/12/2026</p>	<p>Date &amp; Time: Thu, Mar 12, 2026 at 15:04:31 MDT            Position: +032.168295° / -103.878221° (±30.3ft)            Altitude: 3318ft (±22.6ft)            Datum: WGS-84            Azimuth/Bearing: 130° S50E 2311mils True (±11°)            Ensolum</p> 
<p><u>Description</u> Assessment sampling activities; near SS05</p>		
<p><u>View</u> Southeast</p>		



# Photographic Log

XTO Energy, Inc  
 Poker Lake Unit CVX JV PC #006H  
 nAB1730536457


<p><u>Photograph</u> 3</p>	<p><u>Date</u> 3/24/2026</p>	<div style="background-color: #002060; color: white; padding: 5px; text-align: center;"> <h2>South East</h2> </div> <div style="background-color: #e0e0e0; padding: 5px; text-align: center;"> <p>☉ 154°SE (T) • 32.168357, -103.878194 ±9ft ▲ 3215ft</p> </div>  <p style="font-size: small;">SS04              PLU Pierce Canyon 33 Federal CTB              24 Mar 2026 11:28:45 AM</p>
<p><u>Description</u> Assessment sampling activities; near SS04</p>		
<p><u>View</u> Southeast</p>		
<p><u>Photograph</u> 4</p>	<p><u>Date</u> 3/24/2026</p>	<div style="background-color: #002060; color: white; padding: 5px; text-align: center;"> <h2>North</h2> </div> <div style="background-color: #e0e0e0; padding: 5px; text-align: center;"> <p>☉ 3°N (T) • 32.168229, -103.87808 ±9ft ▲ 3215ft</p> </div>  <p style="font-size: small;">SS03              PLU Pierce Canyon 33 Federal CTB              24 Mar 2026 11:29:27 AM</p>
<p><u>Description</u> Assessment sampling activities; near SS03</p>		
<p><u>View</u> North</p>		


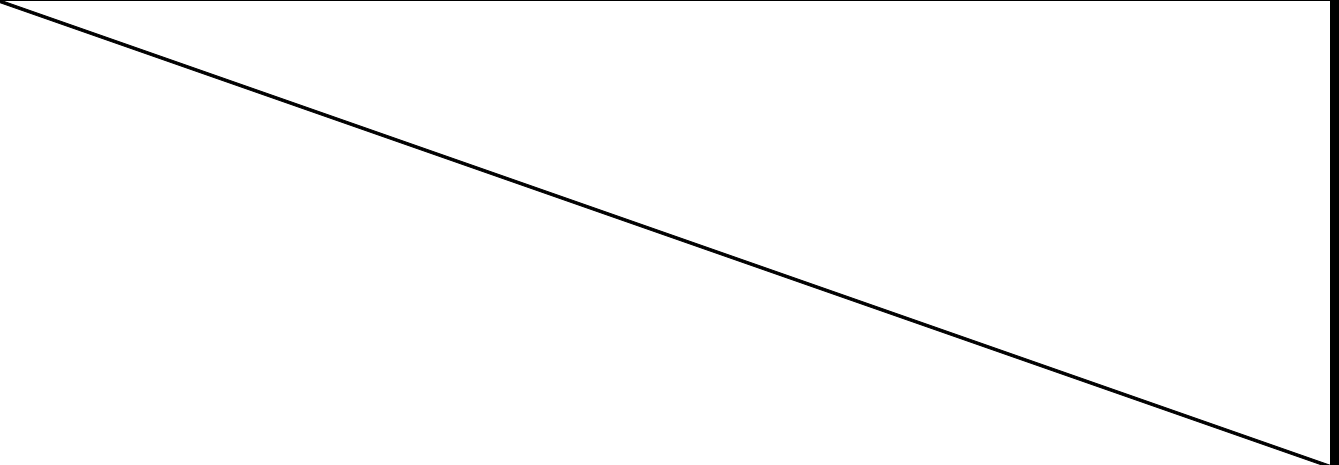



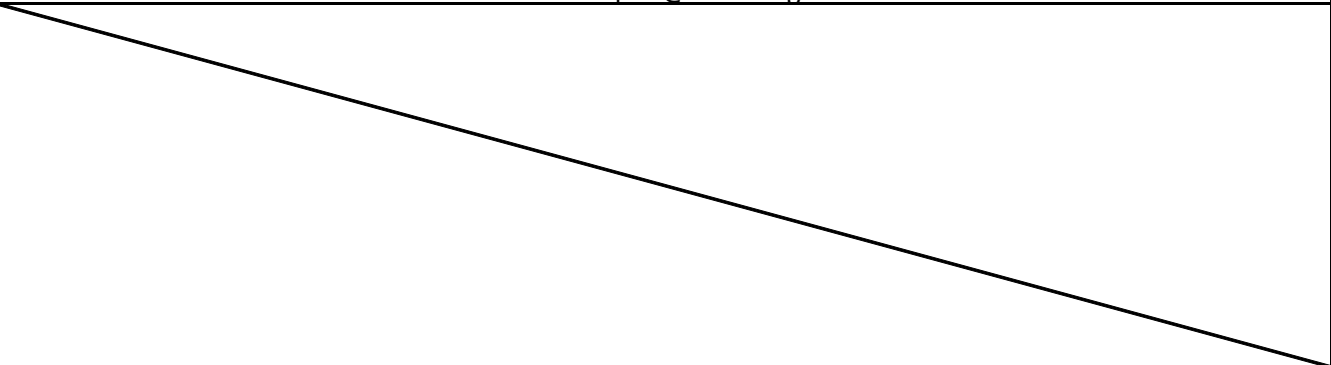
## APPENDIX E


### Lithologic / Soil Sampling Logs

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							Sample Name: SS01		Date: 3/11/2026 & 3/12/2026	
							Site Name: Poker Lake Unit CVX JV PC #006H			
							Incident Number: nAB1730536457			
							Job Number: 03C15587782			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>							Logged By: JR		Method: Hand Auger	
Coordinates: 32.1682784, -103.8780988							Hole Diameter: 3 inches		Total Depth: 12 ft	
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		
							SC	(0-12'): SAND, fine grained, reddish-brown, low pl. cohesive, poorly graded		
D	2172	2.6	N	SS01	0.5					
M	5079	1.6	N		1					
M	6988	3	N	SS01A	2					
D	12443	1.3	N		3					
D	19941	0.8	N	SS01B	4					
D	19941	0.4	N		5					
D	11284	1.9	N	SS01C	6					
D	5000	4.7	N		7					
D	3281	1.4	N		8					
D	2844	3.4	N	SS01D	9					
D	2072	3.8	N		10					
D	1808	3.7	N		11					
D	1271	6.3	N	SS01E	12					

					Sample Name: SS02		Date: 3/11/2026 & 3/12/2026	
					Site Name: Poker Lake Unit CVX JV PC #006H			
					Incident Number: nAB1730536457			
					Job Number: 03C15587782			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: JR		Method: Hand Auger	
Coordinates: 32.1682338, -103.8780993					Hole Diameter: 3 inches		Total Depth: 7 ft	
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
M	156	0.3	N	SS02	0.5	0	SC	(0-2'): SAND, fine grained, reddish-brown, low pl, cohesive, poorly graded
M	224	0.7	N		1	1		
W	2312	3.7	N	SS02A	2	2	CCHE	(2-5'): CCHE, fine sand to gravel, tan to white, unconsolidated, low pl, well graded
D	8204	1.8	N		3	3		
D	12443	2.7	N	SS02B	4	4		
D	7560	2.4	N		5	5	SC	(5-7'): SAND, fine grained, reddish-brown, low pl, cohesive, poorly graded
D	4586	4.2	N		6	6		
D	1708	5.3	N	SS02C	7	7		
Total depth @ 7 feet bgs								
								

					Sample Name: SS03		Date: 3/12/2026 & 3/24/2026	
					Site Name: Poker Lake Unit CVX JV PC #006H			
					Incident Number: nAB1730536457			
					Job Number: 03C15587782			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: JR		Method: Hand Auger	
Coordinates: 32.1682406, -103.8780461					Hole Diameter: 3 inches		Total Depth: 8 ft	
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
D	1366	1.9	N	SS03	0.5	0	SC	(0-4'): SAND, fine grained, reddish-brown, low pl, cohesive, poorly graded
D	425	2.1	N		1	1		
D	3404	1.3	N	SS03A	2	2		
D	6423	1.8	N		3	3		
D	15663	1.4	N	SS03B	4	4	SW-SM	(4-5'): SAND and CCHE, interbedded, fine grained sand, w/ gravel, brown, off white, non pl, unconsolidated, well graded
D	12230	0.7	N		5	5	CCHE	(5-8'): CCHE, fine sand to gravel, tan to white, unconsolidated, low pl, well graded
D	9615	0.4	N	SS03C	6	6		
D	5443	1.5	N		7	7		
D	1691	1.2	N	SS03D	8	8		
Total depth @ 8 feet bgs								
								

					Sample Name: SS04		Date: 3/12/2026 & 3/24/2026	
					Site Name: Poker Lake Unit CVX JV PC #006H			
					Incident Number: nAB1730536457			
					Job Number: 03C15587782			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: JR		Method: Hand Auger	
Coordinates: A1					Hole Diameter: 3 inches		Total Depth: 3 ft	
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
D	1467	3.6	N	SS04	0.5	0	SC	(0-2'): SAND, fine grained, reddish-brown, low pl, cohesive, poorly graded
D	1472	1.0	N		1	1		
D	2391	1.1	N	SS04A	2	2		(2-3'): CCHE, fine sand to gravel, tan to white, unconsolidated, low pl, well graded
D	3164	1.8	N	SS04B	3	3		
Total depth @ 3 feet bgs (Hand Auger Refusal)								
<div style="position: absolute; top: 0; left: 0; bottom: 0; right: 0; border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black;"></div>								



## APPENDIX F

### Laboratory Analytical Reports & Chain of Custody Documentation

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

---

March 19, 2026

BEN BELILL

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: PLU PIERCE CANYON 33 FEDERAL CTB

Enclosed are the results of analyses for samples received by the laboratory on 03/13/26 13:17.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. 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 "Celey D. Keene".

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:	03/13/2026	Sampling Date:	03/11/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 01 0.5' (H261437-01)**

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	03/13/2026	ND	2.16	108	2.00	1.45	QM-07	
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29	QM-07	
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50	QM-07	
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58	QM-07	
Total BTEX	<0.300	0.300	03/13/2026	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>1470</b>	16.0	03/16/2026	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: JF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156		
<b>DRO &gt;C10-C28*</b>	<b>10.2</b>	10.0	03/13/2026	ND	203	102	200	5.19		
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND						

Surrogate: 1-Chlorooctane 93.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 99.5 % 39.9-141

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	03/13/2026	Sampling Date:	03/11/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 01A 2' (H261437-02)**

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	03/13/2026	ND	2.16	108	2.00	1.45	
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29	
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50	
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58	
Total BTEX	<0.300	0.300	03/13/2026	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	03/16/2026	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: JF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156	
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND					

Surrogate: 1-Chlorooctane 92.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 98.6 % 39.9-141

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	03/13/2026	Sampling Date:	03/11/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 01B 4' (H261437-03)**

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	03/13/2026	ND	2.16	108	2.00	1.45		
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29		
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50		
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58		
Total BTEX	<0.300	0.300	03/13/2026	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5200	16.0	03/16/2026	ND	432	108	400	3.77	QM-07	

TPH 8015M		mg/kg		Analyzed By: JF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156		
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19		
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND						

Surrogate: 1-Chlorooctane 95.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 101 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 01C 6' (H261437-04)**

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	03/13/2026	ND	2.16	108	2.00	1.45	
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29	
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50	
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58	
Total BTEX	<0.300	0.300	03/13/2026	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3280	16.0	03/16/2026	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: JF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156	
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND					

Surrogate: 1-Chlorooctane 92.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 98.3 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 01D 9' (H261437-05)**

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	03/13/2026	ND	2.16	108	2.00	1.45		
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29		
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50		
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58		
Total BTEX	<0.300	0.300	03/13/2026	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1920	16.0	03/16/2026	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: JF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156		
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19		
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND						

Surrogate: 1-Chlorooctane 94.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 99.7 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 01E 12' (H261437-06)**

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	03/13/2026	ND	2.16	108	2.00	1.45		
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29		
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50		
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58		
Total BTEX	<0.300	0.300	03/13/2026	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<b>832</b>	16.0	03/16/2026	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: JF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156		
<b>DRO &gt;C10-C28*</b>	<b>10.0</b>	10.0	03/13/2026	ND	203	102	200	5.19		
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND						

Surrogate: 1-Chlorooctane 96.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 102 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/11/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 02 0.5' (H261437-07)**

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	03/13/2026	ND	2.16	108	2.00	1.45	
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29	
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50	
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58	
Total BTEX	<0.300	0.300	03/13/2026	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

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	03/16/2026	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: JF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156	
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND					

Surrogate: 1-Chlorooctane 95.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 102 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/11/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 02A 2' (H261437-08)**

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	03/13/2026	ND	2.16	108	2.00	1.45	
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29	
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50	
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58	
Total BTEX	<0.300	0.300	03/13/2026	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

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>1490</b>	16.0	03/16/2026	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: JF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156	
<b>DRO &gt;C10-C28*</b>	<b>10.8</b>	10.0	03/13/2026	ND	203	102	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND					

Surrogate: 1-Chlorooctane 94.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 100 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/11/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 02B 4' (H261437-09)**

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	03/13/2026	ND	2.16	108	2.00	1.45		
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29		
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50		
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58		
Total BTEX	<0.300	0.300	03/13/2026	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10300	16.0	03/16/2026	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: JF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156		
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19		
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND						

Surrogate: 1-Chlorooctane 94.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 100 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 02C 7' (H261437-10)**

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	03/13/2026	ND	2.16	108	2.00	1.45	
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29	
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50	
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58	
Total BTEX	<0.300	0.300	03/13/2026	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

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>1330</b>	16.0	03/16/2026	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: JF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156	
<b>DRO &gt;C10-C28*</b>	<b>10.0</b>	10.0	03/13/2026	ND	203	102	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND					

Surrogate: 1-Chlorooctane 93.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 99.0 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 03 0.5' (H261437-11)**

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	03/13/2026	ND	2.16	108	2.00	1.45	
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29	
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50	
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58	
Total BTEX	<0.300	0.300	03/13/2026	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	03/16/2026	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: JF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156	
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND					

Surrogate: 1-Chlorooctane 96.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 102 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 04 0.5' (H261437-12)**

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	03/13/2026	ND	2.16	108	2.00	1.45	
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29	
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50	
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58	
Total BTEX	<0.300	0.300	03/13/2026	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1020	16.0	03/16/2026	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: JF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156	
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND					

Surrogate: 1-Chlorooctane 93.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 99.0 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 05 0.5' (H261437-13)**

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	03/13/2026	ND	2.16	108	2.00	1.45		
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29		
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50		
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58		
Total BTEX	<0.300	0.300	03/13/2026	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/16/2026	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: JF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156		
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19		
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND						

Surrogate: 1-Chlorooctane 95.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 101 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 06 0.5' (H261437-14)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/13/2026	ND	2.16	108	2.00	1.45		
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29		
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50		
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58		
Total BTEX	<0.300	0.300	03/13/2026	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/16/2026	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: JF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156		
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19		
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND						

Surrogate: 1-Chlorooctane 94.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 100 % 39.9-141

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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:	03/13/2026	Sampling Date:	03/12/2026
Reported:	03/19/2026	Sampling Type:	Soil
Project Name:	PLU PIERCE CANYON 33 FEDERAL CTB	Sampling Condition:	Cool & Intact
Project Number:	03C1558782	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.1679916, -103.8785706		

**Sample ID: SS 07 0.5' (H261437-15)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/13/2026	ND	2.16	108	2.00	1.45		
Toluene*	<0.050	0.050	03/13/2026	ND	2.22	111	2.00	2.29		
Ethylbenzene*	<0.050	0.050	03/13/2026	ND	2.24	112	2.00	2.50		
Total Xylenes*	<0.150	0.150	03/13/2026	ND	6.80	113	6.00	2.58		
Total BTEX	<0.300	0.300	03/13/2026	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

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	03/16/2026	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: JF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2026	ND	228	114	200	0.156		
DRO >C10-C28*	<10.0	10.0	03/13/2026	ND	203	102	200	5.19		
EXT DRO >C28-C36	<10.0	10.0	03/13/2026	ND						

Surrogate: 1-Chlorooctane 96.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 103 % 39.9-141

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Notes and Definitions

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

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC  
 Project Manager: Ben Bellill  
 Address: 3122 National Parks Hwy  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: 432-296-0627 Fax #: [blank]  
 Project #: 03C1558782 Project Owner: XTO Energy, Inc  
 Project Name: PLU Pierce Canyon 33 Federal CTB  
 Project Location: 32.1679916, -103.8785706  
 Sampler Name: Chice James  
 P.O. #: [blank] Company: XTO Energy, Inc  
 Attn: Dale Woodall  
 Address: 3104 E Greene St  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: [blank] Fax #: [blank]

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	BTEX	TPH	Chloride
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
1	SS01	0.5'	G	1	X											
2	SS01A	2'	G	1	X											
3	SS01B	4'	G	1	X											
4	SS01C	6'	G	1	X											
5	SS01D	9'	G	1	X											
6	SS01E	12'	G	1	X											
7	SS02	0.5'	G	1	X											
8	SS02A	2'	G	1	X											
9	SS02B	4'	G	1	X											
10	SS02C	7'	G	1	X											

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Relinquished By: *Shane Jensen* Date: 3/15/26 Received By: *CS-0402401K*  
 Date: 3/15/26 Time: 0745  
 Relinquished By: *CSW* Date: 3/13/26 Received By: *Speedy*  
 Date: 3/13/26 Time: 1317  
 Observed Temp. °C: 21.1 Sample Condition:  Cool  Intact  
 Corrected Temp. °C: 22.2 Bacteria (only)  Spills  Sample Condition:  Cool  Intact

Delivered By: (Circle One)  UPS  Bus  Other: FORM-006 R.3.6 02/12/25  
 Turnaround Time: Standard  Rush   
 Thermometer ID #140: *10.1*  
 Correction Factor +0.3°C  
 Bacteria (only)  Spills  Sample Condition:  Cool  Intact  
 Observed Temp. °C:  Yes  No  
 Corrected Temp. °C:  Yes  No



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: Ben Bellill  
 Address: 3122 National Parks Hwy  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: 432-296-0627 Fax #: [blank]  
 Project #: 03C1558782 Project Owner: XTO Energy, Inc  
 Project Name: PLU Pierce Canyon 33 Federal CTB  
 Project Location: 32.1679916,-103.8785706  
 Sampler Name: Chloe James  
 P.O. #: [blank] Company: XTO Energy, Inc  
 Attn: Dale Woodall  
 Address: 3104 E Greene St  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: [blank] Fax #: [blank]

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	BTX	TPH	Chloride
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER					
11	SS03	0.5'	G	1	X						3/12/2026	1517	X	X	X
12	SS04	0.5'	G	1	X						3/12/2026	1511	X	X	X
13	SS05	0.5'	G	1	X						3/12/2026	1505	X	X	X
14	SS06	0.5'	G	1	X						3/12/2026	1559	X	X	X
15	SS07	0.5'	G	1	X						3/12/2026	1602	X	X	X

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Relinquished By: *Chloe James* Date: 3/15/26 Time: 6:45  
 Received By: *CS*  
 Relinquished By: *CS* Date: 3/13/26 Time: 3:17  
 Received By: *CS*  
 Delivered By: (Circle One) *CS* Observed Temp. °C: 9.1 Corrected Temp. °C: 8.2  
 Sampler - UPS - Bus - Other: FORM-006 R 3.6 02/12/25

Sample Condition:  Intact  Cool  Yes  No  
 CHECKED BY: *CS* (Initials)  
 Turnaround Time:  Standard  Rush  
 Thermometer ID #40 Correction Factor +0.3°C  
 Bacteria (only)  Sample Condition:  Cool  Intact  Yes  No  
 Observed Temp. °C: *10.1* Corrected Temp. °C: *9.8*

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

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 581915

**QUESTIONS**

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 581915
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAB1730536457
Incident Name	NAB1730536457 POKER LAKE UNIT CVX JV PC #006H @ 30-015-36636
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Well	[30-015-36636] POKER LAKE UNIT CVX JV PC #006H
Incident Facility	[fAPP2126352163] PLU PIERCE CANYON 33 FEDERAL BATT

**Location of Release Source**

Please answer all the questions in this group.

Site Name	POKER LAKE UNIT CVX JV PC #006H
Date Release Discovered	10/16/2017
Surface Owner	Federal

**Incident Details**

Please answer all the questions in this group.

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

**Nature and Volume of Release**

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

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion   Other (Specify)   Produced Water   Released: 94 BBL   Recovered: 50 BBL   Lost: 44 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 2

Action 581915

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 581915
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**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	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*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: Richard Kotzur Title: Senior Project Manager Email: NMEEnvNotifications@exxonmobil.com Date: 05/05/2026
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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 581915

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 581915
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

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

<b>Remediation Plan</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	10300
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	10.8
GRO+DRO (EPA SW-846 Method 8015M)	10.8
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	10/16/2017
On what date will (or did) the final sampling or liner inspection occur	07/05/2026
On what date will (or was) the remediation complete(d)	07/05/2026
What is the estimated surface area (in square feet) that will be reclaimed	1965
What is the estimated volume (in cubic yards) that will be reclaimed	300
What is the estimated surface area (in square feet) that will be remediated	1965
What is the estimated volume (in cubic yards) that will be remediated	300
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 4

Action 581915

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 581915
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

**Remediation Plan (continued)**

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

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

(Select all answers below that apply.)

(Ex Situ) Excavation and <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	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
<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: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 05/05/2026
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 581915

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 581915
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**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, Page 6

Action 581915

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 581915
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>560087</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>03/12/2026</b>
What was the (estimated) number of samples that were to be gathered	<b>30</b>
What was the sampling surface area in square feet	<b>6000</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>No</b>
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CONDITIONS

Action 581915

**CONDITIONS**

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 581915
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
scwells	Remediation plan approved with the following conditions:	5/15/2026
scwells	1) OCD requires that any base or wall that is exposed during excavation, even due to benching and sloping, have samples collected pursuant to 19.15.29 NMAC. Ensure sidewall samples are collected between the varying depths of excavation and clearly show these on the Figures in your closure report.	5/15/2026
scwells	2) Confirmation soil samples must consist of five-point composite samples from the side wall and base and individual grab samples from any wet or discolored areas, representing a surface area of no more than 200 ft2.	5/15/2026
scwells	Submit a complete and accurate report to OCD by 8/13/26.	5/15/2026