

<b>Location:</b>	<b>PLU 210</b>	
<b>Spill Date:</b>	<b>10/7/2024</b>	
<b>Area 3</b>		
Approximate Area =	6432.51	sq. ft.
Average Saturation (or depth) of spill =	1.50	inches

Average Porosity Factor =	0.10	
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<b>VOLUME OF LEAK</b>		
Total Crude Oil =	1.86	bbls
Total Produced Water =	12.46	bbls

<b>TOTAL VOLUME OF LEAK</b>		
Total Crude Oil =	1.99	bbls
Total Produced Water =	13.33	bbls

<b>TOTAL VOLUME RECOVERED</b>		
Total Crude Oil =	0.13	bbls
Total Produced Water =	0.87	bbls



January 5, 2025

XTO Energy, Inc  
3104 E Greene Street  
Carlsbad, New Mexico 88220

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

RE: Release Investigation and Remediation Closure Report  
PLU 210  
Unit I, Section 18, Township 24 South, Range 30 East  
32.2152420°, -103.9148870°  
Eddy County, New Mexico  
Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356

To Whom It May Concern:

Terracon Consultants, Inc. (Terracon) is submitting this Release Investigation and Remediation Closure Report for the above-referenced site. Prepared in line with New Mexico Oil Conservation Division (NMOCD) regulations, this report addresses the environmental actions taken in response to a release of produced water. The release was discovered on October 7, 2024, and was found to be a result of a pinhole on the pumping tee. The detailed assessment and remedial actions by Terracon are outlined in the following sections.

Action Items

Completed Actions

- 1) Conducted an initial site assessment and a series of sampling events.
- 2) Prepared maps and associated data tables.
- 3) Soil samples were collected from the excavation and submitted to an approved laboratory for analysis. Samples were collected to determine levels of impact vertically and horizontally.
- 4) The excavation of the release area was completed with the intent to remove impacted soil as determined by the Closure Criteria set by NMOCD.
- 5) Soil stockpiles on site were placed on plastic and bermed around the edges to reduce loss.
- 6) Five-point composite confirmation soil samples were collected every 200 square feet.
- 7) Remedial activities were terminated when a confirmation sample was collected below the NMOCD Remediation Action Levels (RALs) for Oil and Gas impacted soils.

Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



- 
- 8) A summary of the information provided in this report is included in Appendix C, as C-141 summary sheet.
- 

Anticipated Actions

- 
- 1) Approval for the Remediation Closure Report by the NMOCD.
- 

Site Information

The Notice of the Release was provided to the NMOCD by Kailee Smith on October 8, 2024, with the submission of the initial C-141 and has been assigned. NMOCD Reference ID: nAPP2428245356. PLU 210 is in the Poker Lake lease in the northern extent of the Permian Basin, situated in the Southeastern part of New Mexico. The site is located within Unit 1, Section 18, Township 24 South, Range 30 East, approximately 9.3 miles east of Malaga, New Mexico. The surface ownership for this location resides with the Bureau of Land Management. A Topographic Map and Site Location Map are included in Appendix A, as Exhibit 1 and Exhibit 2, respectively.

Regulatory Criteria

Groundwater

Data from the New Mexico Office of the State Engineer (NMOSE) website identified a water well (C-04676 POD 1) located 0.39 miles south of the site as indicated in the NMOSE Pod Location Map (Exhibit 3, Appendix A). This groundwater well was completed to a depth of 120 feet below ground surface (bgs) in 2022, with no water encountered. The boring log for C-04676, is included as Appendix D.

Wetlands

The U.S. Fish and Wildlife Service, National Wetlands Inventory website indicates that a riverine environment is located approximately 600 feet north of the site, as indicated in the Designated Wetland Area Map (Exhibit 5, Appendix A).

Karst

Geospatial data obtained from the BLM Carlsbad Field Office website indicated that the site is within an area of low risk for Karst formations, as indicated in the Cave Karst Public UCP Map (Exhibit 6, Appendix A).

Remediation

Remediation Standards

Per New Mexico Administrative Code (NMAC) 19.15.29.12, the closure criteria for the site is based on the remedial requirements for an on-pad release consisting of the removal of the affected soil from the surface to 4 feet below grade surface (bgs) in an area with depth to groundwater greater than 100 feet. Closure criteria are shown in the following table:

Closure Documentation  
 PLU 210 | Eddy County, New Mexico  
 January 5, 2025 | Terracon Project No. KH247048  
 NMOCD Reference ID: nAPP2428245356



Closure Criteria for Remediation at Depths Greater than 4 Feet bgs		
Parameters	Closure Criteria	Analytical Method
Total Benzene, Toluene, Ethylbenzene and Xylenes (Total BTEX)	50 mg/kg	EPA Method 8021B
Benzene	10 mg/kg	EPA Method 8021B
Chlorides	20,000 mg/kg	EPA Method 300
Petroleum Hydrocarbons GRO+DRO	1,000 mg/kg	EPA Method 8015M
Total Petroleum Hydrocarbons (TPH) GRO, DRO and MRO	2,500 mg/kg	EPA Method 8015M

**Remedial / Delineation Activities**

Terracon conducted remedial activities at the site from November 18, 2024, through November 20, 2024. An area of approximately 3,435 square feet was affected by the release. A total of 24 delineation samples from 14 locations were collected and submitted for analysis of BTEX, Chlorides, and TPH. Delineation sample results for BTEX and Chloride were below applicable NMOCD closure criteria. One delineation sample, DSV-02 0.5', exceeded the closure criteria for TPH with a reported value of 17,842 mg/kg. A Delineation Sample Map depicting the sample locations, analytical results, and the excavation extent are included in Appendix A, Exhibit 3, and Exhibit 7, respectively. Delineation sample results are included in Appendix B, Table 1.

**Confirmation/Closure Activities**

Areas exhibiting visual impact and the area that exceeded the closure criteria were excavated to a depth of between 0.5 feet to 2.5 feet bgs. A total of 23 five-point composite confirmation soil samples were collected from November 19, 2024, through December 6, 2024, and submitted for analysis of BTEX, chloride, and TPH. All but one confirmation sample yielded results for BTEX, chloride, and TPH below applicable NMOCD closure criteria. Confirmation sample CSF-16 exceeded the closure criteria with 1,250 mg/kg diesel range organics (DRO). This area was resampled on December 6, 2024, allowing two weeks for natural attenuation. The sample results for CSF-16.2 on December 6, 2024, reported TPH to be 493 mg/kg, which is below the applicable NMOCD closure criteria for this site of 1,000 mg/kg. The excavation was backfilled with imported fill material, leveled off, and compacted. Confirmation sample results are included in Appendix B as Table 2 and Table 3, respectively.

A total of approximately 120 cubic yards (cu. yds.) of loose soil were excavated during remedial activities. Excavated material was stockpiled on-site atop a polyethylene liner pending disposal under an approved Form C-138. The excavated material was disposed of at Lea Land Facility. Soil disposal waste manifests are available upon request. A Confirmation Sample Map depicting the floor and wall sample locations and analytical results is included in Appendix A as Exhibit 8, respectively. Photographs of the project site are included in Appendix E. The analytical reports and Chain of Custody (COC) are included in Appendix F. Terracon's Standard of Care, Limitation, and Reliance is included in Appendix G.

Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



## Conclusion

In accordance with NMAC 19.15.29.12, remediation of the impacted material is complete, and XTO Energy respectfully requests approval for the Remediation Closure Report of the reportable incident that occurred on October 7, 2024, at the NMOCD Reference # nAPP2428245356 – PLU 210 location.

We are grateful for the opportunity to offer our environmental services to XTO Energy. We are committed to providing the highest level of service and support. Should you need further information or have any queries, we encourage you to contact our office at your earliest convenience.

Sincerely,



Prepared by:

A handwritten signature in black ink that reads 'Austin Worley'.

**Austin Worley**  
Staff Scientist  
Lubbock, TX

Reviewed by:

A handwritten signature in black ink that reads 'John Grams'.

**John Grams, P.G. (TX)**  
Senior Consultant  
Lubbock, TX

Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



Attachments:

Appendix A – Exhibits

- Exhibit 1 – Topographic Map
- Exhibit 2 – Site Location Map
- Exhibit 3 – Delineation Map
- Exhibit 4 – NMOSE POD Map
- Exhibit 5 – Designated Wetland Area Map
- Exhibit 6 – Cave Karst Public UCP Map
- Exhibit 7 – Excavation Plan Map
- Exhibit 8 – Confirmation Sample Map

Appendix B – Tables

- Table 1 – Delineation Samples
- Table 2 – Confirmation Floor Samples
- Table 3 – Confirmation Wall Samples

Appendix C – C-141 Summary

Appendix D – Well Information

Appendix E – Photographic Log

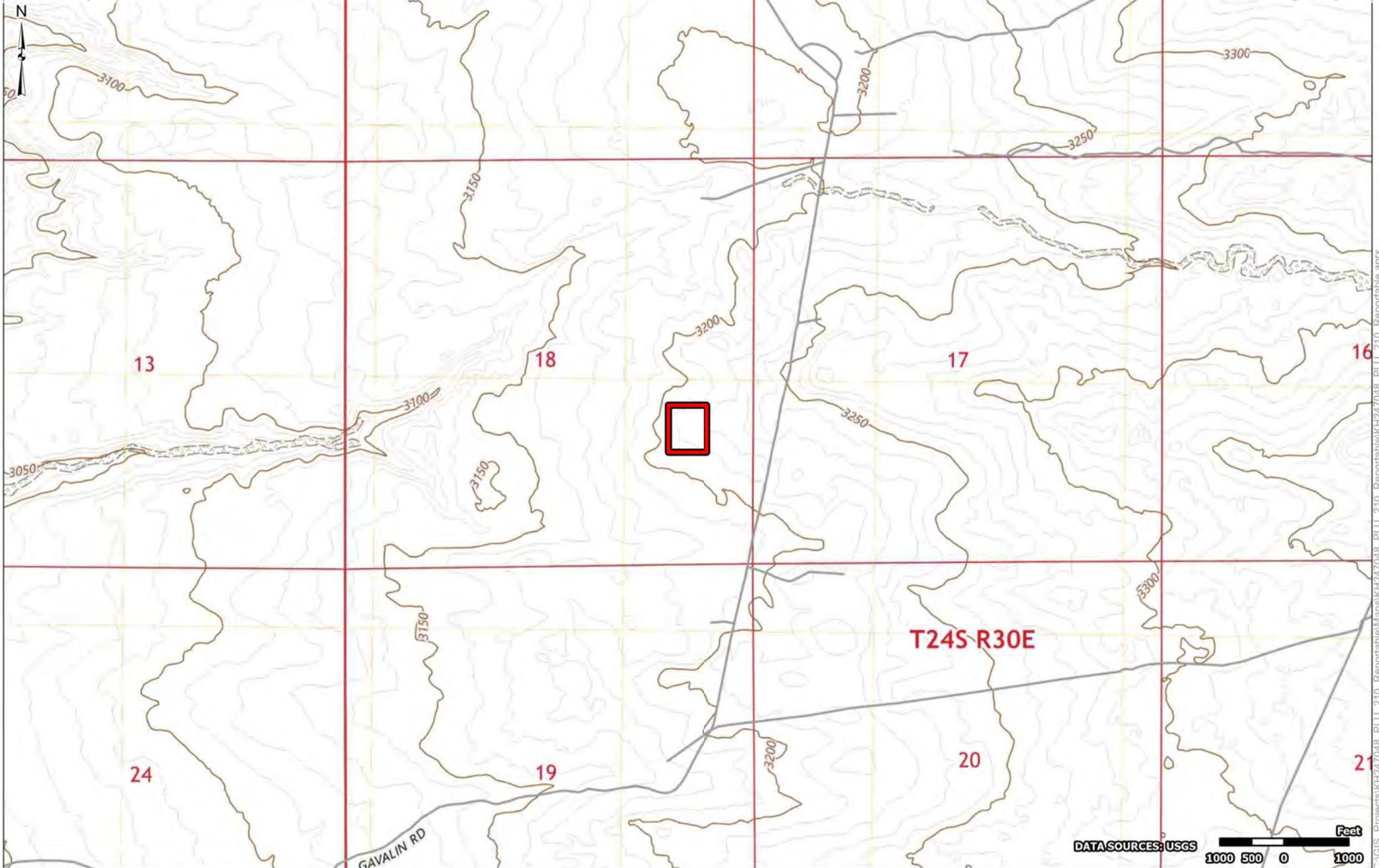
Appendix F – Analytical Report and Chain of Custody

Appendix G – Terracon Standard of Care, Limitation, and Reliance

Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



## **APPENDIX A – EXHIBITS**



DATA SOURCE: USGS  
 1000 500 0 1000 Feet



Site Boundary

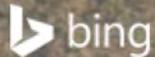
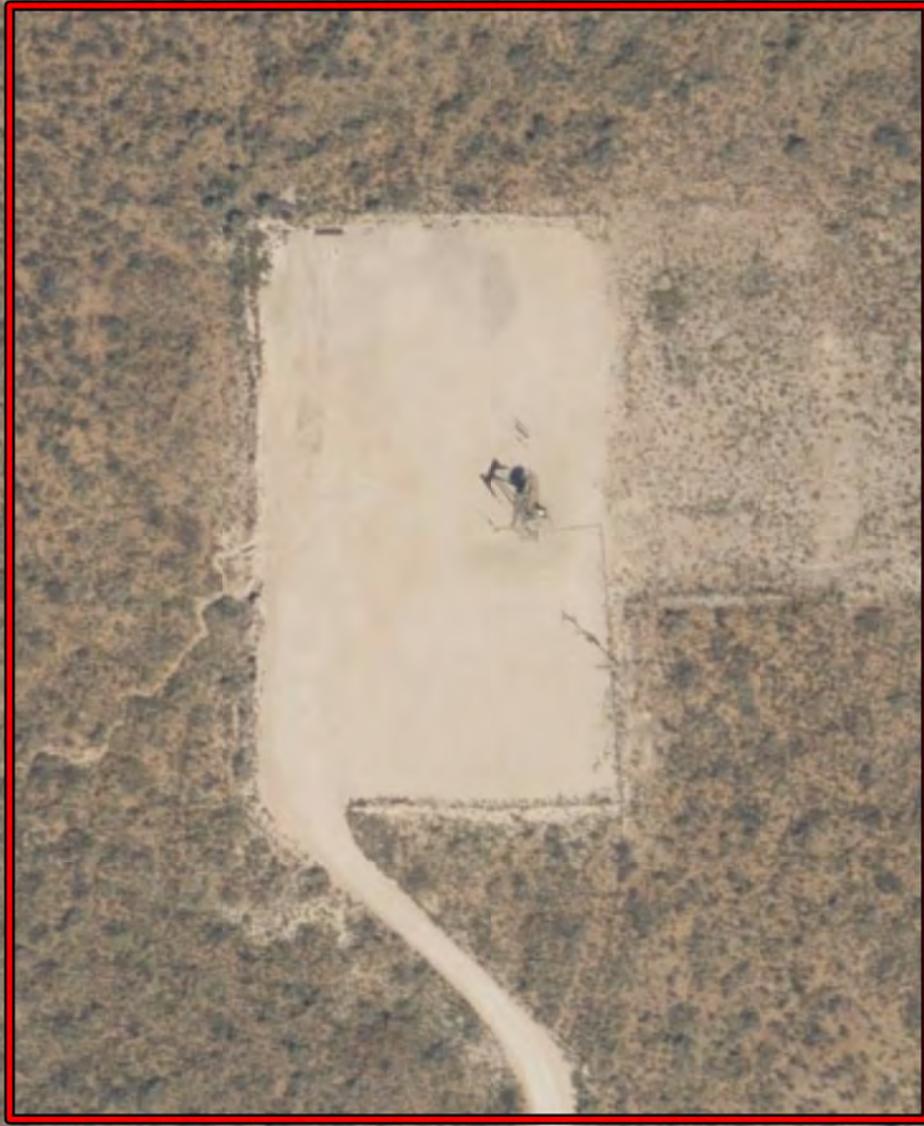
Project No.: KH247048  
 Date: Dec 17 2024  
 Drawn By: JWJ  
 Reviewed By: JRG

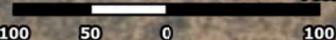
4526 W Pierce St  
 Carlsbad, NM  
 PH. 806-300-0140 terracon.com

**Topographic Map**  
 PLU 210  
 32.2152420, -103.9148870  
 XTO Energy Inc  
 Loving, Eddy County, New Mexico

**Exhibit**  
 1

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DATA SOURCES: Bing  Feet



 Site Boundary

Project No.:  
KH247048  
Date:  
Dec 17 2024  
Drawn By:  
JWL  
Reviewed By:  
JRG



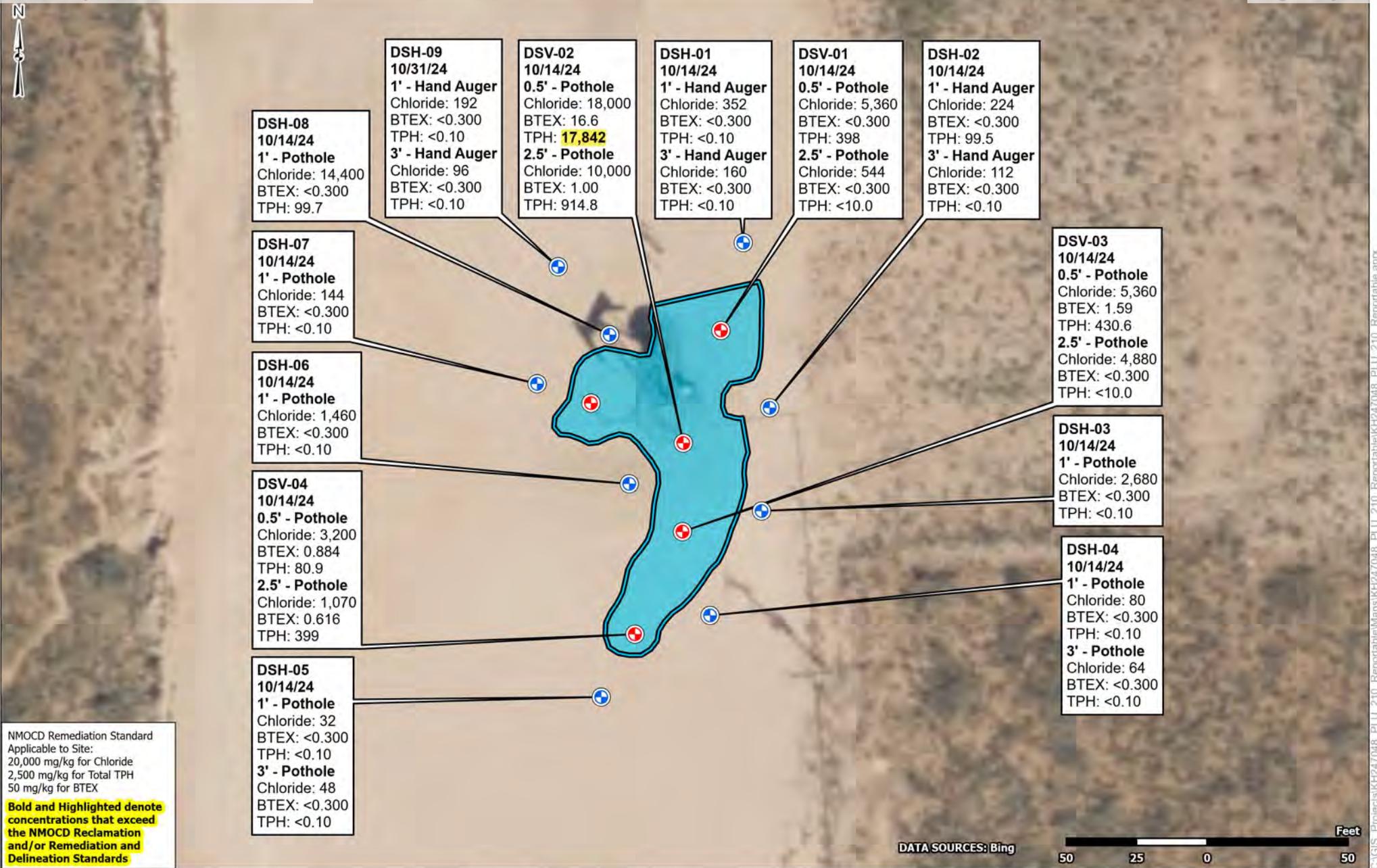
4526 W Pierce St  
Carlsbad, NM  
PH. 806-300-0140      terracon.com

**Site Location Map**

PLU 210  
32.2152420, -103.9148870  
XTO Energy Inc  
Loving, Eddy County, New Mexico

**Exhibit**

**2**



- Inferred Release (3,435 Sq. Ft.)
- Vertical Delineation Sample
- Horizontal Delineation Sample

Project No.: KH247048  
Date: Nov 14 2024  
Drawn By: JWJ  
Reviewed By: JRG

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PH. 806-300-0140 terracon.com

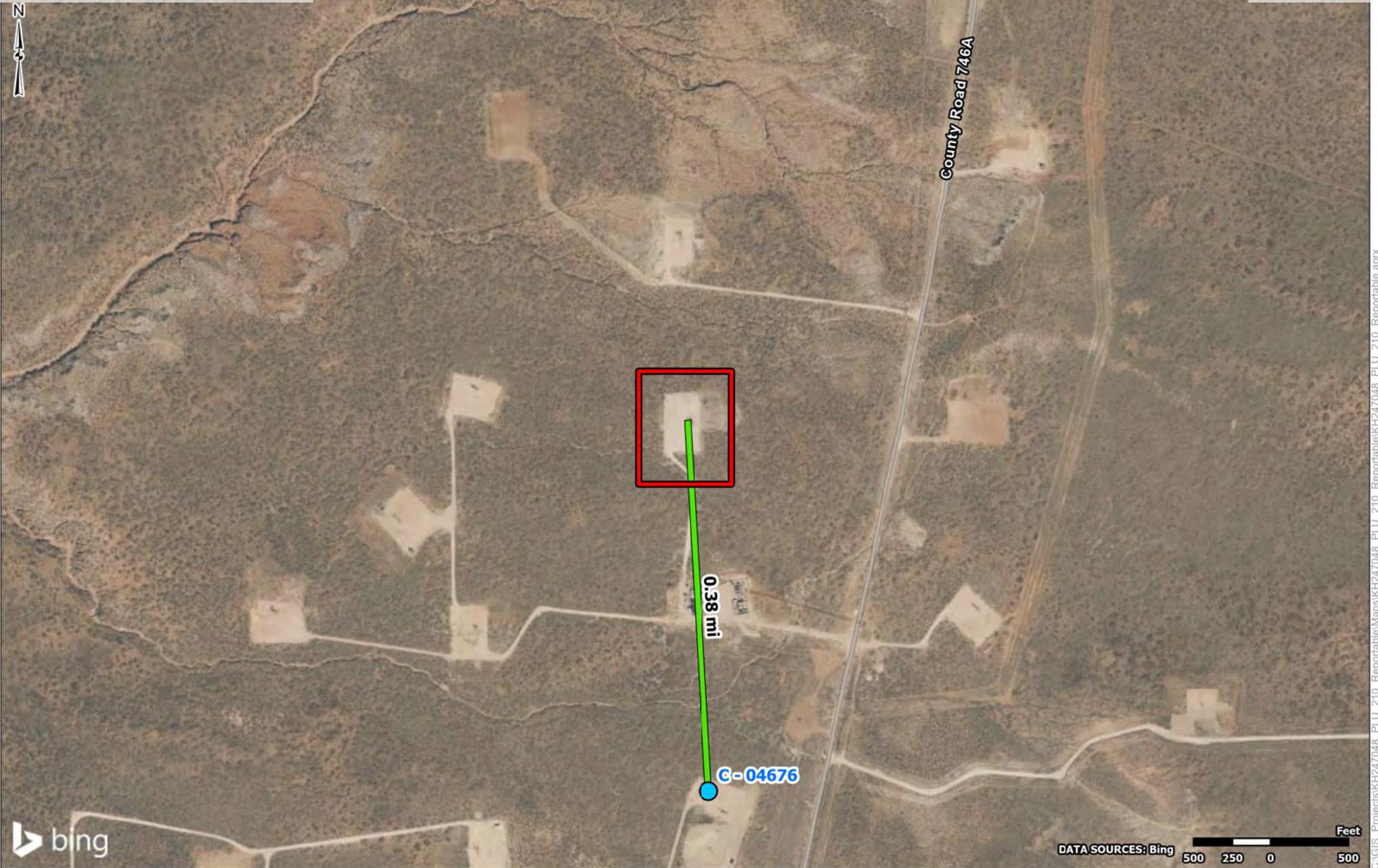
**Delineation Sample Map**

PLU 210  
32.2152420, -103.9148870  
XTO Energy Inc  
Loving, Eddy County, New Mexico

**Exhibit**

**3**

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- Site Boundary
- NMOSE POD Location

Project No.: KH247048  
 Date: Dec 17 2024  
 Drawn By: JWJ  
 Reviewed By: JRG

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 Carlsbad, NM  
 PH. 806-300-0140      terracon.com

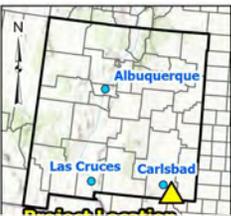
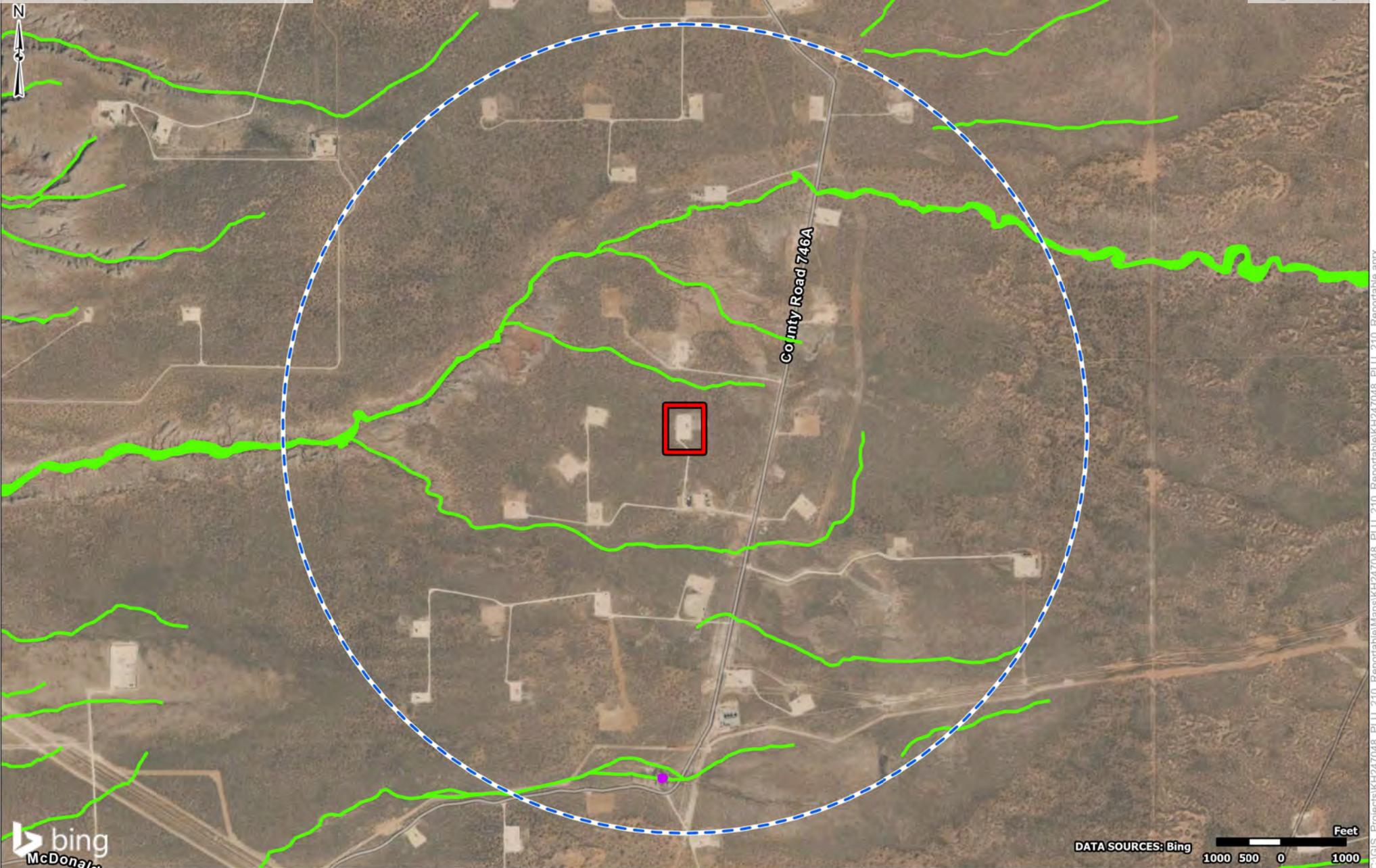
**NMOSE POD Location Map**

PLU 210  
 32.2152420, -103.9148870  
 XTO Energy Inc  
 Loving, Eddy County, New Mexico

**Exhibit**

**4**

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- Site Boundary
- 1 Mile Radius
- Freshwater Pond
- Riverine

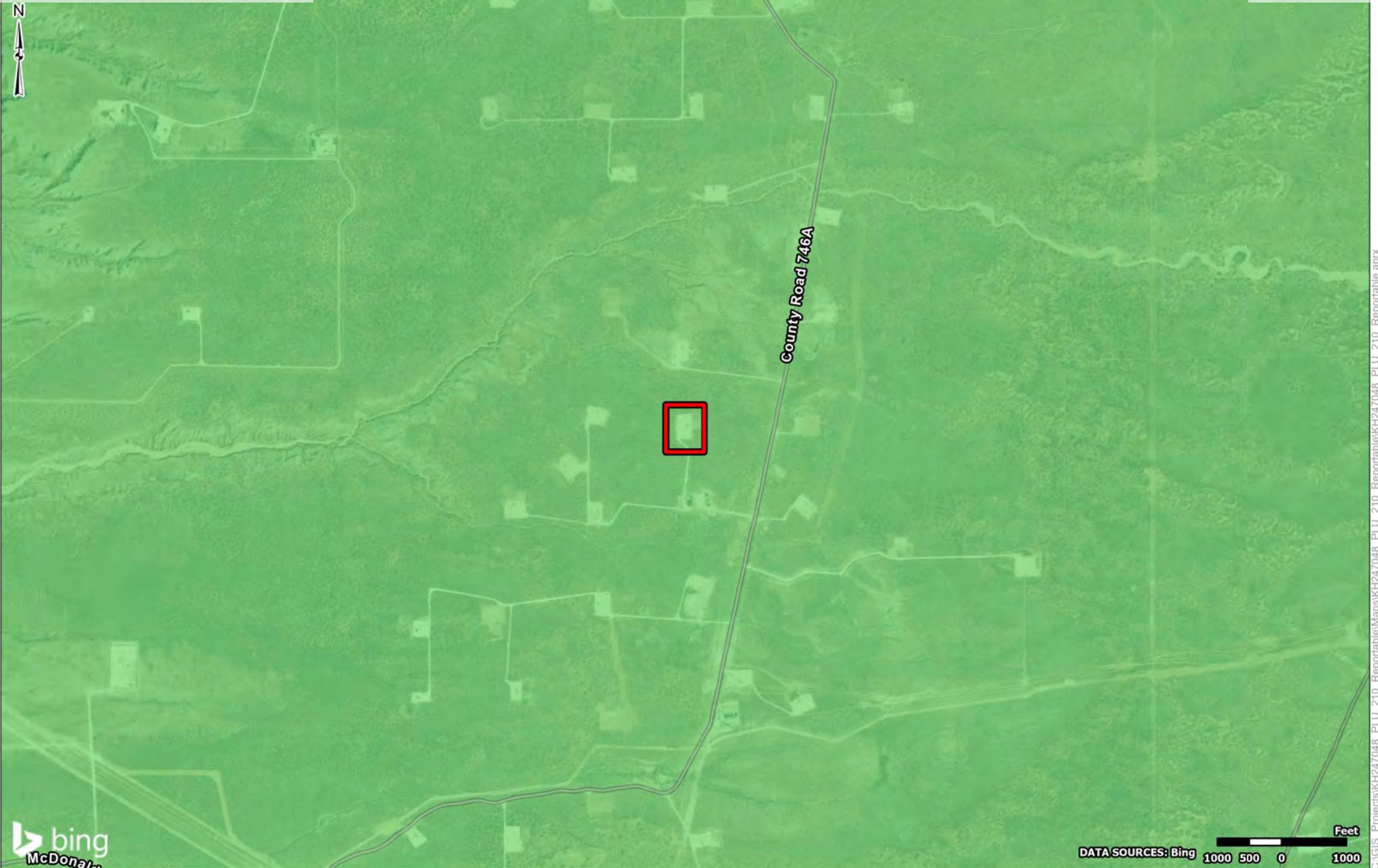
Project No.: KH247048  
 Date: Dec 17 2024  
 Drawn By: JWJ  
 Reviewed By: JRG

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 Carlsbad, NM  
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**Designated Wetland Area Map**  
 PLU 210  
 32.2152420, -103.9148870  
 XTO Energy Inc  
 Loving, Eddy County, New Mexico

**Exhibit**  
5

C:\GIS - Projects\KH247048 - PLU 210 - Reportable\Maps\KH247048 - PLU 210 - Reportable\KH247048 - PLU 210 - Reportable.aprx



-  Site Boundary
- Karst Potential**
-  Low
-  Medium
-  High

Project No.: KH247048  
 Date: Dec 17 2024  
 Drawn By: JWJ  
 Reviewed By: JRG



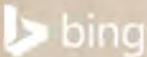
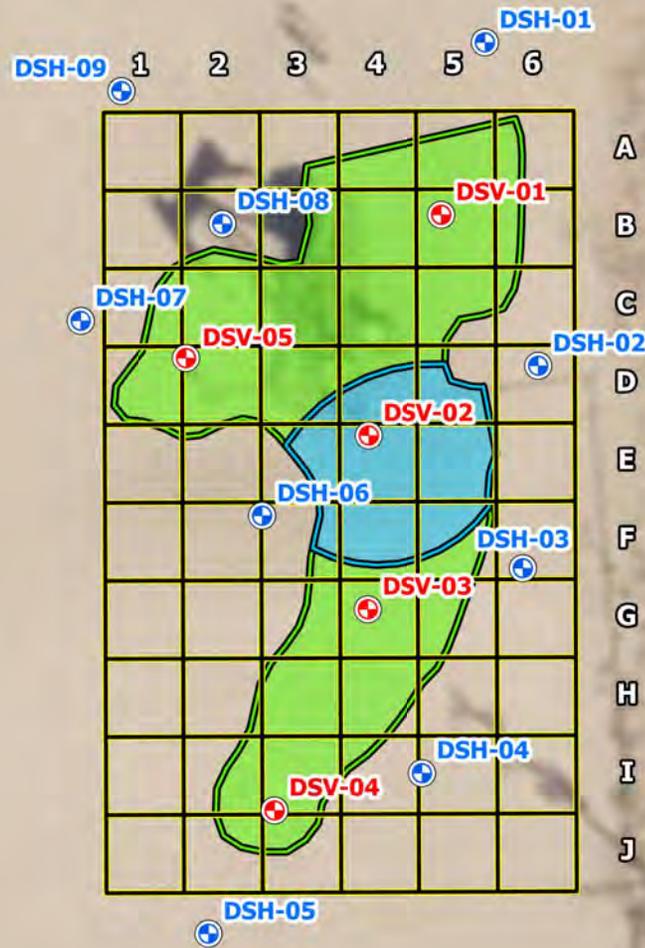
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 PH. 806-300-0140 terracon.com

**Cave Karst Public UCP Map**

PLU 210  
 32.2152420, -103.9148870  
 XTO Energy Inc  
 Loving, Eddy County, New Mexico

**Exhibit**

**6**



DATA SOURCES: Bing

50 25 0 50

Feet



- Vertical Delineation Sample
- Horizontal Delineation Sample
- 200 Sq. Ft. Grid
- Excavation Depth
- 0.5'

Project No.: KH247048  
 Date: Dec 17 2024  
 Drawn By: JWJ  
 Reviewed By: JRG

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 PH. 806-300-0140 terracon.com

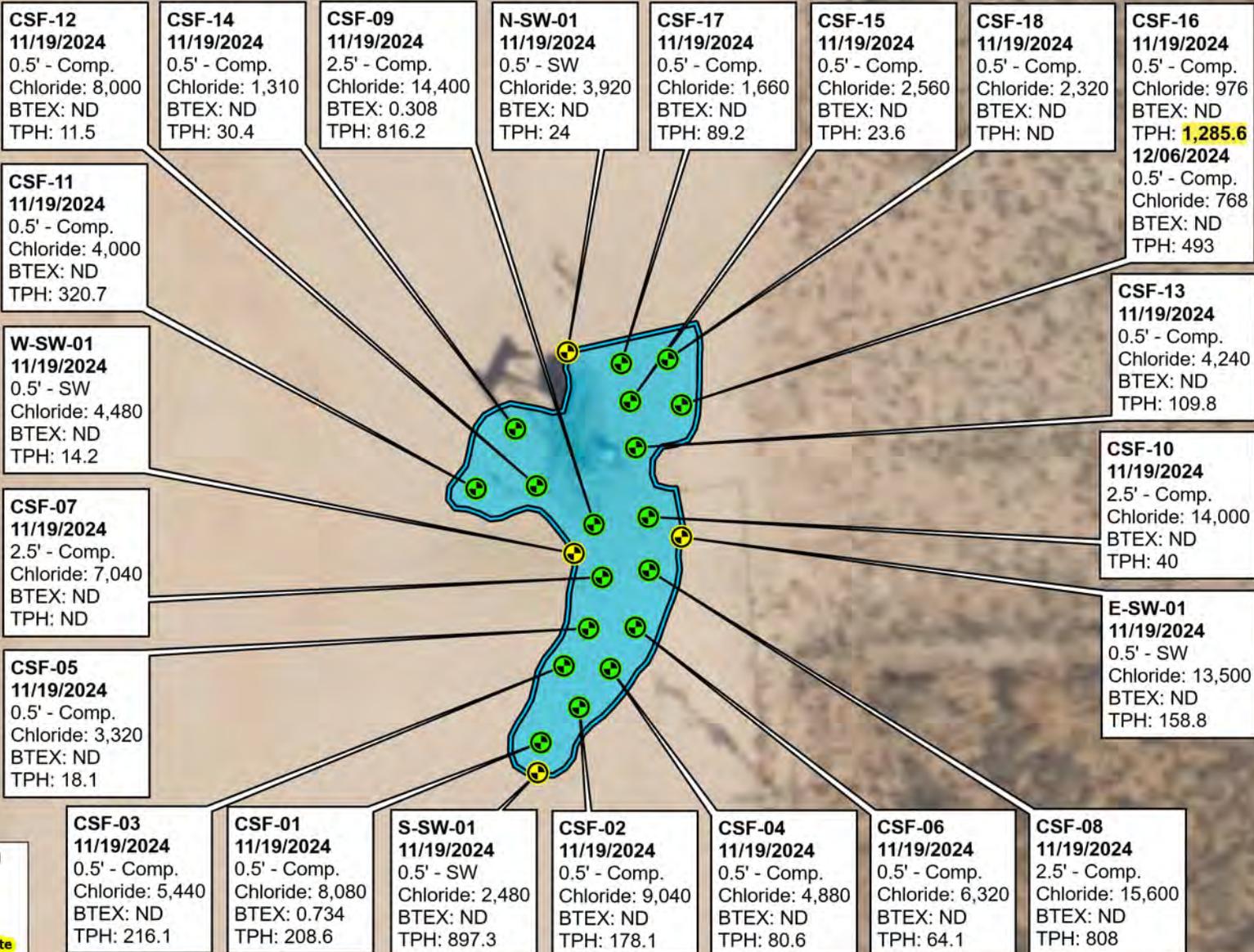
**Excavation Plan Map**

PLU 210  
 32.2152420, -103.9148870  
 XTO Energy Inc  
 Loving, Eddy County, New Mexico

**Exhibit**

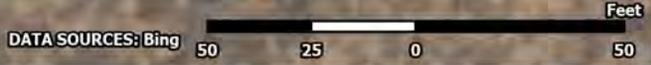
**7**

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NMOCD Remediation Standard  
 Applicable to Site:  
 20,000 mg/kg for Chloride  
 2,500 mg/kg for Total TPH  
 50 mg/kg for BTEX

**Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards**



- Inferred Release (3,435 Sq. Ft.)
- Confirmation Sample Floor
- Confirmation Sample

Project No.: KH247048  
 Date: Dec 17 2024  
 Drawn By: JWJ  
 Reviewed By: JRG

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 Carlsbad, NM  
 PH. 806-300-0140 terracon.com

**Confirmation Sample Map**

PLU 210  
 32.2152420, -103.9148870  
 XTO Energy Inc  
 Loving, Eddy County, New Mexico

**Exhibit**

**8**

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Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



## **APPENDIX B – TABLES**

PLU 210 Table 1 - Release Assessment Project Code: KH247048 NMOCD Reference No. napp2428245356											
Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX <sup>1</sup> (mg/Kg)	Total TPH <sup>2</sup> (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
Release Assessment											
Horizontal Delineation Results											
DSH-01 1'	10/14/2024	1.0	HA	In-Situ	352	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-01 3'	10/14/2024	3.0	HA	In-Situ	160	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-02 1'	10/14/2024	1.0	HA	In-Situ	224	<0.050	<0.300	99.5	<10.0	99.5	<10.0
DSH-02 3'	10/14/2024	3.0	PH	In-Situ	112	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-03 1'	10/14/2024	1.0	PH	In-Situ	2,680	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-04 1'	10/17/2024	1.0	PH	In-Situ	80	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-04 3'	10/17/2024	3.0	PH	In-Situ	64	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-05 1'	10/17/2024	1.0	PH	In-Situ	32	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-05 3'	10/17/2024	3.0	PH	In-Situ	48	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-06 1'	10/17/2024	1.0	PH	In-Situ	1,460	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-07 1'	10/17/2024	1.0	PH	In-Situ	144	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-08 1'	10/17/2024	1.0	PH	In-Situ	14,400	<0.050	<0.300	99.7	<10.0	79.3	20.4
DSH-09 1'	10/31/2024	1.0	PH	In-Situ	192	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSH-09 3'	10/31/2024	3.0	HA	In-Situ	96	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
Vertical Delineation Results											
DSV-01 0.5'	10/17/2024	0.5	PH	Excavated	5,360	<0.050	<0.300	398	<10.0	251	147
DSV-01 2.5'	10/17/2024	2.5	PH	In-Situ	544	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSV-02 0.5'	10/17/2024	0.5	PH	Excavated	18,000	<0.050	16.6	<b>17,842</b>	702	<b>14,600</b>	2,540
DSV-02 2.5'	10/17/2024	2.5	PH	Excavated	10,000	<0.050	1.00	914.8	36.8	746	132
DSV-02 4.5'	10/17/2024	4.5	PH	In-Situ	160	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSV-03 0.5'	10/17/2024	0.5	PH	Excavated	5,360	<0.050	1.59	430.6	16.8	356	57.8
DSV-03 2.5'	10/17/2024	2.5	PH	In-Situ	4,880	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
DSV-04 0.5'	10/17/2024	0.5	PH	Excavated	3,200	<0.050	0.884	80.9	<10.0	80.9	<10.0
DSV-04 2.5'	10/17/2024	2.5	PH	In-Situ	1,070	<0.050	0.616	399	14.3	331	53.7
DSV-05 0.5'	10/17/2024	0.5	PH	Excavated	1,420	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
NMOCD Remediation Standards <sup>4</sup>					20,000	10	50	2,500	1,000		N/A
1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes 2. TPH = Total petroleum hydrocarbons 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs 4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 12/01/23. This includes areas reasonably needed for production being deferred to be reclaimed at the time of abandonment. ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL). NA = Not Analyzed Bold denotes concentrations above applicable laboratory SDLs. Bold and Highlighted values exceed the NMOCD Reclamation and/or Remediation and Delineation Standards. In-situ = Sample is representative of material which remains in-place at the site. Excavated = Sample is representative of material which was excavated and disposed of at a permitted disposal facility.									Data Entry:		
									Reviewed By:	BSM	
										GS	
										AHW	
									 Terracon Explore with us		

PLU 210 Table 2 - Confirmation Floors Project Code: KH247048 MOCD Reference No. napp242824535											
Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX <sup>1</sup> (mg/Kg)	Total TPH <sup>2</sup> (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
<b>Confirmation Table</b>											
CSF-01	11/19/2024	0.5	Composite	In-Situ	8,080	<0.050	0.734	208.6	<10.0	177	31.6
CSF-02	11/19/2024	0.5	Composite	In-Situ	9,040	<0.050	<0.300	178.1	<10.0	147	31.1
CSF-03	11/19/2024	0.5	Composite	In-Situ	5,440	<0.050	<0.300	216.1	<10.0	178	38.1
CSF-04	11/19/2024	0.5	Composite	In-Situ	4,880	<0.050	<0.300	80.6	<10.0	61.6	19
CSF-05	11/19/2024	0.5	Composite	In-Situ	3,320	<0.050	<0.300	18.1	<10.0	18.1	<10.0
CSF-06	11/19/2024	0.5	Composite	In-Situ	6,320	<0.050	<0.300	64.1	<10.0	64.1	<10.0
CSF-07	11/19/2024	2.5	Composite	In-Situ	7,040	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
CSF-08	11/19/2024	2.5	Composite	In-Situ	15,600	<0.050	<0.300	808	14	681	113
CSF-09	11/19/2024	2.5	Composite	In-Situ	14,400	<0.050	0.308	816.2	15.2	599	202
CSF-10	11/19/2024	2.5	Composite	In-Situ	14,000	<0.050	<0.300	40	<10.0	40	<10.0
CSF-11	11/19/2024	0.5	Composite	In-Situ	4,000	<0.050	<0.300	320.7	<10.0	304	16.7
CSF-12	11/19/2024	0.5	Composite	In-Situ	8,000	<0.050	<0.300	11.5	<10.0	11.5	<10.0
CSF-13	11/19/2024	0.5	Composite	In-Situ	4,240	<0.050	<0.300	109.8	<10.0	86.6	23.2
CSF-14	11/19/2024	0.5	Composite	In-Situ	1,310	<0.050	<0.300	30.4	<10.0	30.4	<10.0
CSF-15	11/19/2024	0.5	Composite	In-Situ	2,560	<0.050	<0.300	23.6	<10.0	23.6	<10.0
CSF-16	11/19/2024	0.5	Composite	In-Situ	976	<0.050	<0.300	1,285.60	<10.0	1,250	35.6
CSF-16.2	12/6/2024	0.5	Composite	In-Situ	768	<0.050	<0.300	493	<10.0	493	<10.0
CSF-17	11/19/2024	0.5	Composite	In-Situ	1,660	<0.050	<0.300	89.2	<10.0	89.2	<10.0
CSF-18	11/19/2024	0.5	Composite	In-Situ	2,320	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0
NMOCD Remediation Standards <sup>4</sup> (Greater than Depths of 4 ft bgs)					20,000	10	50	2,500	1,000		N/A
1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes 2. TPH = Total petroleum hydrocarbons 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 12/01/23 ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL). NA = Not Analyzed Bold denotes concentrations above applicable laboratory SDLs. Bold and Highlighted values exceed the NMOCD Reclamation and/or Remediation and Delineation Standards. In-situ = Sample is representative of material which remains in-place at the site. Excavated = Sample is representative of material which was excavated and disposed of at a permitted disposal facility.									Data Entry:		
									Reviewed By:	BSM	
										GS	
										AHW	
											

PLU 210 Table 3 - Confirmation Sidewalls Project Code: KH247048 NMOCD Reference No. napp2428245356												
Sample ID	Sample Date	Sample Start Depth (ft bgs)	Sample End Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX <sup>1</sup> (mg/Kg)	Total TPH <sup>2</sup> (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
						EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
<b>Confirmation Table</b>												
N-SW-01	11/19/2024	0	0.5	Composite	In-Situ	3,920	<0.050	<0.300	24	<10.0	24	<10.0
E-SW-01	11/19/2024	0	0.5	Composite	In-Situ	13,500	<0.050	<0.300	158.8	<10.0	128	30.8
S-SW-01	11/19/2024	0	0.5	Composite	In-Situ	2,480	<0.050	<0.300	897.3	<10.0	876	21.3
W-SW-01	11/19/2024	0	0.5	Composite	In-Situ	4,480	<0.050	<0.300	14.2	<10.0	14.2	<10.0
NMOCD Remediation Standards <sup>4</sup> (Greater than Depths of 4 ft bgs)						20,000	10	50	2,500	1,000		N/A
1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes 2. TPH = Total petroleum hydrocarbons 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. 4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 12/01/23 ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL). NA = Not Analyzed Bold denotes concentrations above applicable laboratory SDLs. <b>Bold and Highlighted values exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.</b> In-situ = Sample is representative of material which remains in-place at the site. Excavated = Sample is representative of material which was excavated and disposed of at a permitted disposal facility.										Data Entry:		
										Reviewed By:	BSM	
											GS	
											AHW	
												

Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



## **APPENDIX C – C-141 SUMMARY SHEET**

1/2/2025			
Closure Documentation			
<b>NMOCD REPORT DETAILS</b>			
<u>Submission Contact, Application, Fee and Payment Details</u>			
Name:	Colton Brown		
Email:	<a href="mailto:colton.s.brown@exxonmobil.com">colton.s.brown@exxonmobil.com</a>		
Phone:			
<b>Initial Release C-141</b>			
<u>Application Details</u>			
Incident ID:	nAPP2428245356		
District:	Artesia		
County:	Eddy		
Legal Description:	Unit: I	Section: 18	Township: 24S
			Range: 30E
Lat/Long:	N: 32.750506		E: -104.330647
<u>Prerequisites</u>			
Incident Operator:	XTO ENERGY, INC		
Release Type:	Produced Water & Crude Oil		
Incident Status:	Pending NMOCD Approval		
<u>Release Information</u>			
Site Name:	PLU 210		
Date Discovered:	10/5/2024		(MM/DD/YYYY)
Surface Owner:	Federal		
<u>Incident Details</u>			
Incident Type:	Produced Water Release		
Fire:	No		
Injuries:	No		
Watercourse:	No		
Public Health:	No		
Significant to Property or Environment:	No		
Detrimental to Freshwater:	No		
<u>Nature and Volume of Release</u>			
Released Product:	Produced Water		
Cause:	Corrosion		
Source:	Well Head		
Release:	13	(bbls/Mcf)	
Recovered:	1	(bbls/Mcf)	
Additional Details:			
<u>Nature and Volume of Release</u>			
Released Product:	Crude Oil		
Cause:	Corrosion		
Source:	Well Head		
Release:	2	(bbls/Mcf)	
Recovered:	0	(bbls/Mcf)	
Additional Details:			
<u>Nature and Volume of Release</u>			
Is this a gas submission	No		
was this a major release (Y/N) >25bbls	No		
Justification of release volume calculation	Yes		
<u>Initial Response</u>			
Release has been stopped	Yes		
Release area has been secured:	Yes		
Released material has been contained	Yes		
All free liquids have been recovered	Yes		
If actions have not been completed, why?	N/A	(Attached Explanation)	

Remediation Action Plan C-141			
<u>Site Characterization</u>			
What is groundwater beneath effected area?	100ft - 500ft		
What method was used to determine depth?	NM OSE iWaters Database Search		
Did release impact GW or Surface Water?	No		
Continuously flowing watercourse	greater than 5 (mi.)		
Lakebed, sinkhole, or playa (measured from the high-water mark)	greater than 5 (mi.)		
An occupied permanent residence	greater than 5 (mi.)		
Spring or private domestic well	greater than 5 (mi.)		
Incorporated municipal boundaries	greater than 5 (mi.)		
Wetland	between 500 to 1,000 (ft.)		
Subsurface mine	greater than 5 (mi.)		
A (non-karst) unstable area	greater than 5 (mi.)		
Categorize the risk of this well / site being in a karst geology	Low		
A 100-year floodplain	between 1 to 5 (mi.)		
Did the release impact areas not on an exploration, development, production, or storage site		No	
<u>Remediation Plan</u>			
Have lateral and vertical extents of impacts been delineated, to the strictest standards?	Yes		
Was the release entirely contained within a lined containment?	No		
Soil Contamination Sampling (provide the highest observed value for each)(0.1)	Chloride	18,000	(mg/kg)
	Total TPH	17,842	(mg/kg)
	GRO+DRO	14,600	(mg/kg)
	BTEX	16.6	(mg/kg)
	Benzene	<0.050	(mg/kg)
Date of Remediation Commencement	11/18/2024		
Date of Final Sampling or Liner Inspection	12/6/2024		
Date of Remediation Completion	11/20/2024		
Estimated Surface Area (sq.ft) to be reclaimed	0		
Estimated Volume (cu. Yds) to be reclaimed	0		
Estimated Surface Area (sq.ft) to be remediated	3,435		
Estimated Volume (cu. Yds) to be remediated	120		
Excavation and off-site disposal (dig & haul)	Yes	(Ex-Situ)	
Excavation and on-site remediation (land farm)	N/A	(Ex-Situ)	
Soil Vapor Extraction	N/A	(In-Situ)	
Chemical processing (soil shredding...etc)	N/A	(In-Situ)	
Biological processing (microbes / fertilizer...etc)	N/A	(In-Situ)	
<b>Physical processing (soil washing, gypsum...etc)</b>	N/A	(In-Situ)	
Ground Water Abatement	N/A		
Other (Non-listed remedial process)	N/A		
Closure/Deferral Request C-141			
Closure Request (attachment with explanation)	Yes		
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes		
Total Surface Area (sq.ft) to be remediated	3,435	(Square Feet)	
Total Volume (cu. Yds) to be remediated	120	(Cubic Yards)	
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	No		
Estimated Surface Area (sq.ft) to be reclaimed	3,435	(Square Feet)	
Estimated Volume (cu. Yds) to be reclaimed	745	(Cubic Yards)	
Attached Summary of additional remediation Activities	Yes		
Requesting approval of Reclamation Completion	No		

Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



## **APPENDIX D – WELL INFORMATION**



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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

OSE DIT DEC 21 2022 PM 3:14

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C-04676 POD 1		WELL TAG ID NO.		OSE FILE NO(S). C-04676	
	WELL OWNER NAME(S) XTO ENERGY INC				PHONE (OPTIONAL) 575-200-0729	
	WELL OWNER MAILING ADDRESS 3104 E GREENE ST				CITY CARLSBAD	STATE NM
					ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES 12	SECONDS 32.66	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND
	LONGITUDE	-103	54	50.95	W	* DATUM REQUIRED: WGS 84
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE POKER LAKE UNIT # 231						

2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1184	NAME OF LICENSED DRILLER RUSSELL SOUTHERLAND			NAME OF WELL DRILLING COMPANY WEST TEXAS WATER WELL SERVICE		
	DRILLING STARTED 11/22/22	DRILLING ENDED 11/22/22	DEPTH OF COMPLETED WELL (FT) 120	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)		
	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) N/A		
	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:						
	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)
	FROM	TO					
				NO CASING IN HOLE			

3. ANNULAR MATERIAL	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				
				N/A		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. C-04676	POD NO. 1	TRN NO. 736286
LOCATION 245.30E.19.1.2.2	WELL TAG ID NO.	PAGE 1 OF 2



Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



## **APPENDIX E – PHOTOGRAPHIC LOG**



Photo 1

Site Sign



Photo 2

View of Release Facing North



Photo 3

Excavation In Progress



Photo 4

Excavation Complete

Poker Lake Unit 210  
12/3/2024

Exhibit 7 - Photographic Log  
NMOCD ID: napp2428245356



Photo 5

Western Scrape In Progress



Photo 6

Eastern Scrape In Progress



Photo 7

Western Area Being Compacted



Photo 8

Excavation Area Being Backfilled and Compacted

Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



## **APPENDIX F – ANALYTICAL REPORT AND CHAIN OF CUSTODY**



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

---

October 24, 2024

AUSTIN WORLEY  
TERRACON CONSULTANTS  
5827 50TH ST. SUITE 1  
LUBBOCK, TX 79424

RE: PLU 210

Enclosed are the results of analyses for samples received by the laboratory on 10/18/24 15:28.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](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". The signature is written in a cursive, flowing style.

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	10/18/2024	Sampling Date:	10/14/2024
Reported:	10/24/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO - LEA CO NM		

**Sample ID: DSH - 01 1' (H246394-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	211	105	200	14.1	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	217	109	200	15.2	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 94.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.6 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/14/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 01 3' (H246394-02)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	211	105	200	14.1	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	217	109	200	15.2	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 83.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.8 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/14/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 02 1' (H246394-03)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>224</b>	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	211	105	200	14.1	
<b>DRO &gt;C10-C28*</b>	<b>99.5</b>	10.0	10/22/2024	ND	217	109	200	15.2	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 83.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/14/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 02 3' (H246394-04)**

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	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	211	105	200	14.1	
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	217	109	200	15.2	
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 98.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/14/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 03 1' (H246394-05)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2680	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 87.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 73.5 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 04 1' (H246394-06)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 97.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.6 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 04 3' (H246394-07)**

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	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 92.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.4 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 05 1' (H246394-08)**

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	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.0 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	10/18/2024	Sampling Date:	10/17/2024
Reported:	10/24/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO - LEA CO NM		

**Sample ID: DSH - 05 3' (H246394-09)**

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	10/22/2024	ND	2.13	107	2.00	6.77		
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81		
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11		
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05		
Total BTEX	<0.300	0.300	10/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	10/21/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2		
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8		
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND						

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.6 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 06 1' (H246394-10)**

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	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1460</b>	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.2 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSH - 07 1' (H246394-11)**

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	10/22/2024	ND	2.13	107	2.00	6.77		
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81		
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11		
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05		
Total BTEX	<0.300	0.300	10/22/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>144</b>	16.0	10/21/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2		
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8		
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND						

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.3 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	10/18/2024	Sampling Date:	10/17/2024
Reported:	10/24/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO - LEA CO NM		

**Sample ID: DSH - 08 1' (H246394-12)**

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	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>14400</b>	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
<b>DRO &gt;C10-C28*</b>	<b>79.3</b>	10.0	10/21/2024	ND	219	109	200	16.8	
<b>EXT DRO &gt;C28-C36</b>	<b>20.4</b>	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 94.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSV - 01 0.5' (H246394-13)**

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	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5360	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
DRO >C10-C28*	251	10.0	10/21/2024	ND	219	109	200	16.8	
EXT DRO >C28-C36	147	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 98.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.2 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSV - 01 2.5' (H246394-14)**

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	10/22/2024	ND	2.13	107	2.00	6.77		
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81		
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11		
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05		
Total BTEX	<0.300	0.300	10/22/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	544	16.0	10/21/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2		
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8		
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND						

Surrogate: 1-Chlorooctane 92.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.0 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSV - 02 0.5' (H246394-16)**

BTEX 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
<b>Toluene*</b>	<b>1.29</b>	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
<b>Ethylbenzene*</b>	<b>2.47</b>	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
<b>Total Xylenes*</b>	<b>12.8</b>	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
<b>Total BTEX</b>	<b>16.6</b>	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 301 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>18000</b>	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>702</b>	50.0	10/22/2024	ND	225	113	200	16.2	
<b>DRO &gt;C10-C28*</b>	<b>14600</b>	50.0	10/22/2024	ND	219	109	200	16.8	
<b>EXT DRO &gt;C28-C36</b>	<b>2540</b>	50.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 154 % 48.2-134

Surrogate: 1-Chlorooctadecane 278 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	10/18/2024	Sampling Date:	10/17/2024
Reported:	10/24/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO - LEA CO NM		

**Sample ID: DSV - 02 2.5' (H246394-17)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
<b>Ethylbenzene*</b>	<b>0.141</b>	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
<b>Total Xylenes*</b>	<b>0.861</b>	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
<b>Total BTEX</b>	<b>1.00</b>	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 124 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>10000</b>	16.0	10/21/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>36.8</b>	10.0	10/21/2024	ND	225	113	200	16.2	
<b>DRO &gt;C10-C28*</b>	<b>746</b>	10.0	10/21/2024	ND	219	109	200	16.8	
<b>EXT DRO &gt;C28-C36</b>	<b>132</b>	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 99.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.4 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSV - 02 4.5' (H246394-18)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
Toluene*	<0.050	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
Ethylbenzene*	<0.050	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
Total Xylenes*	<0.150	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
Total BTEX	<0.300	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/22/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 96.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.9 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	10/18/2024	Sampling Date:	10/17/2024
Reported:	10/24/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO - LEA CO NM		

**Sample ID: DSV - 03 0.5' (H246394-19)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/22/2024	ND	2.13	107	2.00	6.77	
<b>Toluene*</b>	<b>0.108</b>	0.050	10/22/2024	ND	2.08	104	2.00	4.81	
<b>Ethylbenzene*</b>	<b>0.232</b>	0.050	10/22/2024	ND	2.12	106	2.00	4.11	
<b>Total Xylenes*</b>	<b>1.25</b>	0.150	10/22/2024	ND	6.32	105	6.00	4.05	
<b>Total BTEX</b>	<b>1.59</b>	0.300	10/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 132 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5360</b>	16.0	10/22/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>16.8</b>	10.0	10/21/2024	ND	225	113	200	16.2	
<b>DRO &gt;C10-C28*</b>	<b>356</b>	10.0	10/21/2024	ND	219	109	200	16.8	
<b>EXT DRO &gt;C28-C36</b>	<b>57.8</b>	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSV - 03 2.5' (H246394-20)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/21/2024	ND	1.94	97.0	2.00	12.0		
Toluene*	<0.050	0.050	10/21/2024	ND	2.01	101	2.00	9.90		
Ethylbenzene*	<0.050	0.050	10/21/2024	ND	2.04	102	2.00	8.38		
Total Xylenes*	<0.150	0.150	10/21/2024	ND	6.10	102	6.00	8.23		
Total BTEX	<0.300	0.300	10/21/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4880	16.0	10/22/2024	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2		
DRO >C10-C28*	<10.0	10.0	10/21/2024	ND	219	109	200	16.8		
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND						

Surrogate: 1-Chlorooctane 99.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.1 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSV - 04 0.5' (H246394-21)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/21/2024	ND	1.94	97.0	2.00	12.0	
Toluene*	<0.050	0.050	10/21/2024	ND	2.01	101	2.00	9.90	
<b>Ethylbenzene*</b>	<b>0.097</b>	0.050	10/21/2024	ND	2.04	102	2.00	8.38	
<b>Total Xylenes*</b>	<b>0.787</b>	0.150	10/21/2024	ND	6.10	102	6.00	8.23	
<b>Total BTEX</b>	<b>0.884</b>	0.300	10/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3200</b>	16.0	10/22/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/21/2024	ND	225	113	200	16.2	
<b>DRO &gt;C10-C28*</b>	<b>80.9</b>	10.0	10/21/2024	ND	219	109	200	16.8	
EXT DRO >C28-C36	<10.0	10.0	10/21/2024	ND					

Surrogate: 1-Chlorooctane 97.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.6 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSV - 04 2.5' (H246394-22)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/21/2024	ND	1.94	97.0	2.00	12.0	
Toluene*	<0.050	0.050	10/21/2024	ND	2.01	101	2.00	9.90	
<b>Ethylbenzene*</b>	<b>0.075</b>	0.050	10/21/2024	ND	2.04	102	2.00	8.38	
<b>Total Xylenes*</b>	<b>0.541</b>	0.150	10/21/2024	ND	6.10	102	6.00	8.23	
<b>Total BTEX</b>	<b>0.616</b>	0.300	10/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1070</b>	16.0	10/22/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>14.3</b>	10.0	10/22/2024	ND	225	113	200	16.2	
<b>DRO &gt;C10-C28*</b>	<b>331</b>	10.0	10/22/2024	ND	219	109	200	16.8	
<b>EXT DRO &gt;C28-C36</b>	<b>53.7</b>	10.0	10/22/2024	ND					

Surrogate: 1-Chlorooctane 94.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 10/18/2024  
 Reported: 10/24/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - LEA CO NM

Sampling Date: 10/17/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DSV - 05 0.5' (H246394-23)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/21/2024	ND	1.94	97.0	2.00	12.0		
Toluene*	<0.050	0.050	10/21/2024	ND	2.01	101	2.00	9.90		
Ethylbenzene*	<0.050	0.050	10/21/2024	ND	2.04	102	2.00	8.38		
Total Xylenes*	<0.150	0.150	10/21/2024	ND	6.10	102	6.00	8.23		
Total BTEX	<0.300	0.300	10/21/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1420	16.0	10/22/2024	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/22/2024	ND	225	113	200	16.2		
DRO >C10-C28*	<10.0	10.0	10/22/2024	ND	219	109	200	16.8		
EXT DRO >C28-C36	<10.0	10.0	10/22/2024	ND						

Surrogate: 1-Chlorooctane 89.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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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

pg 2/3

Company Name: Terracon  
 Project Manager: Austin Worley  
 Address: 4526 W. Pierce Street  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: 5756895949 Fax #:   
 Project #: KH247048 Project Owner: XTO Energy  
 Project Name: PLU 210  
 Project Location: Lea  
 Sampler Name: Gus Sanchez  
 FOR LAB USE ONLY

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

BILL TO:

ANALYS REQUEST

Lab I.D.	Sample I.D.	Depth		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							ACID/BASE:	ICE / COOL	OTHER :	PRESERV.	SAMPLING DATE	TIME	Chloride (EPA Method 4500)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold
		Start	End			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :											
H2416394		11	1	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	13:45	X	X	X	X	
		12	1	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	13:52	X	X	X	X	
		13	0.5	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	13:55	X	X	X	X	
		14	2.5	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	13:59	X	X	X	X	
		15	5	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	14:01	X	X	X	X	
		16	0.5	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	14:05	X	X	X	X	
		17	2.5	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	14:07	X	X	X	X	
		18	4.5	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	14:09	X	X	X	X	
		19	0.5	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	14:27	X	X	X	X	
		20	2.5	G	1	X	X	X	X	X	X	X	X	X	X	1/17/2024	14:29	X	X	X	X	

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Relinquished By: *[Signature]* Date: 10-18-24 Time: 12:45  
 Received By: *[Signature]* Date: 10-18-24 Time: 15:38

Observed Temp. °C: 0.91  
 Corrected Temp. °C: 0.31

Sample Condition: Cool  Intact   
 Bites  Yes  No  No

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

REMARKS: Cost Code: 1137941001

Verbal Result:  Yes  No Add'l Phone #:

All Results are emailed. Please provide Email address:  
 joesph.guesnier@terracon.com; travis.casey@terracon.com;  
 chuck.smith@terracon.com; beckysue.miller@terracon.com;  
 gus.sanchez@terracon.com; austin.worley@terracon.com

FORM-006 R.32 10/07/21



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

pg 3/5

Company Name: Terracon		BILL TO:		ANALYS REQUEST	
Project Manager: Austin Worley		P.O. #:			
Address: 4526 W. Pierce Street		Company: XTO Energy			
City: Carlsbad		Attn: Colton Brown			
Phone #: 5756895949		Address: 3104 E Greene St.			
Project #: KH247048		City: Carlsbad			
Project Name: PLU 210		State: NM, 88220			
Project Location: Lea		Phone #:			
Sampler Name: Gus Sanchez		Fax #:			
FOR LAB USE ONLY					

Lab I.D.	Sample I.D.	Depth		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	Chloride (EPA Method 4500)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold
		Start	End			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :						
H240394	21	0.5	0.5	G	1	X						10/17/2024	14:34	X	X	X	
	22	2.5	2.5	G	1	X						10/17/2024	14:37	X	X	X	
	23	0.5	0.5	G	1	X						10/17/2024	14:42	X	X	X	

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Relinquished By:	Date: 10-18-24	Time: 12:45	Received By: <i>Stoelignery</i>	Checked By: <i>SR</i>	Turnaround Time: Standard	Bacteria (only) Sample Condition: <input checked="" type="checkbox"/> Yes
Delivered By: (Circle One)	Observed Temp. °C: 0.9	Corrected Temp. °C: 0.3	Sample Condition: <input checked="" type="checkbox"/> Intact	Thermometer ID: #140	Rush: <input checked="" type="checkbox"/> Yes	Cool: <input type="checkbox"/> Yes
Sampler - UPS: <input type="checkbox"/> Bus						Observed Temp. °C: <input type="checkbox"/>
						Corrected Temp. °C: <input type="checkbox"/>

FORM-005 R 3.2 10/07/21  
 Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinalabsnm.com



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

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November 05, 2024

AUSTIN WORLEY  
TERRACON CONSULTANTS  
5827 50TH ST. SUITE 1  
LUBBOCK, TX 79424

RE: PLU 210

Enclosed are the results of analyses for samples received by the laboratory on 10/31/24 12:30.

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

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	10/31/2024	Sampling Date:	10/31/2024
Reported:	11/05/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO - LEA CO NM		

**Sample ID: DSH - 09 1' (H246645-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2024	ND	2.23	112	2.00	1.89	
Toluene*	<0.050	0.050	11/01/2024	ND	2.42	121	2.00	4.54	
Ethylbenzene*	<0.050	0.050	11/01/2024	ND	2.51	126	2.00	6.61	
Total Xylenes*	<0.150	0.150	11/01/2024	ND	7.52	125	6.00	7.29	
Total BTEX	<0.300	0.300	11/01/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	11/01/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2024	ND	207	104	200	3.56	
DRO >C10-C28*	<10.0	10.0	11/01/2024	ND	197	98.3	200	2.42	
EXT DRO >C28-C36	<10.0	10.0	11/01/2024	ND					

Surrogate: 1-Chlorooctane 84.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	10/31/2024	Sampling Date:	10/31/2024
Reported:	11/05/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO - LEA CO NM		

**Sample ID: DSH - 09 3' (H246645-02)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/01/2024	ND	2.23	112	2.00	1.89	
Toluene*	<0.050	0.050	11/01/2024	ND	2.42	121	2.00	4.54	
Ethylbenzene*	<0.050	0.050	11/01/2024	ND	2.51	126	2.00	6.61	
Total Xylenes*	<0.150	0.150	11/01/2024	ND	7.52	125	6.00	7.29	
Total BTEX	<0.300	0.300	11/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.9 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/01/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2024	ND	207	104	200	3.56	
DRO >C10-C28*	<10.0	10.0	11/01/2024	ND	197	98.3	200	2.42	
EXT DRO >C28-C36	<10.0	10.0	11/01/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- S-05 The surrogate recovery is outside of lab established statistical control limits but still within method limits. Data is not adversely affected.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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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: Terracon  
 Project Manager: Austin Worley  
 Address: 4526 W. Pierce Street  
 City: Carlsbad State: NM Zip: 88220  
 Phone #: 915-262-9701 Fax #:   
 Project #: KH247048 Project Owner: XTO Energy  
 Project Name: PLU 210  
 Project Location: Lea  
 Sample Name: Gus Sanchez  
 FOR LAB USE ONLY

P.O. #:   
 Company: Terracon  
 Attn: Austin Worley  
 Address: 4526 W. Pierce St.  
 City: Carlsbad  
 State: NM, 88220  
 Phone #:   
 Fax #:

Lab I.D.	Sample I.D.	Depth		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chloride (EPA Method 4500)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold
		Start	End			GROUNDWAT	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.									
H246645	DSH-09 1'	1	1	G	1										10-31-24	10:34					
	DSH-09 21	3	3	G	1										10-31-24	10:37					

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Relinquished By: *[Signature]* Date: 10/31/24  
 Received By: *[Signature]*  
 Observed Temp: 5.4°C Corrected Temp: 4.8°C  
 Sample Condition: Cool Intact Yes  No   
 Checked By: *[Signature]*  
 Turnaround Time: Standard  Rush   
 Thermometer ID: #110 - 0.18°C  
 Correction Factor: 0.18°C  
 Bacteria (only) Sample Condition: Cool  Observed Temp. °C  Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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



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

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November 26, 2024

AUSTIN WORLEY  
TERRACON CONSULTANTS  
5827 50TH ST. SUITE 1  
LUBBOCK, TX 79424

RE: PLU 210

Enclosed are the results of analyses for samples received by the laboratory on 11/20/24 11:46.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

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



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 01 0.5' (H247082-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2024	ND	2.26	113	2.00	1.50	
<b>Toluene*</b>	<b>0.078</b>	0.050	11/22/2024	ND	2.17	108	2.00	2.43	
<b>Ethylbenzene*</b>	<b>0.086</b>	0.050	11/22/2024	ND	2.16	108	2.00	3.18	
<b>Total Xylenes*</b>	<b>0.570</b>	0.150	11/22/2024	ND	6.45	107	6.00	3.57	
<b>Total BTEX</b>	<b>0.734</b>	0.300	11/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8080</b>	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	184	92.0	200	0.689	
<b>DRO &gt;C10-C28*</b>	<b>177</b>	10.0	11/21/2024	ND	185	92.5	200	0.684	
<b>EXT DRO &gt;C28-C36</b>	<b>31.6</b>	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 96.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 02 0.5' (H247082-02)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.26	113	2.00	1.50		
Toluene*	<0.050	0.050	11/22/2024	ND	2.17	108	2.00	2.43		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.16	108	2.00	3.18		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	6.45	107	6.00	3.57		
Total BTEX	<0.300	0.300	11/22/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>9040</b>	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	184	92.0	200	0.689		
<b>DRO &gt;C10-C28*</b>	<b>147</b>	10.0	11/21/2024	ND	185	92.5	200	0.684		
<b>EXT DRO &gt;C28-C36</b>	<b>31.1</b>	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 94.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 03 0.5' (H247082-03)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.26	113	2.00	1.50		
Toluene*	<0.050	0.050	11/22/2024	ND	2.17	108	2.00	2.43		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.16	108	2.00	3.18		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	6.45	107	6.00	3.57		
Total BTEX	<0.300	0.300	11/22/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>5440</b>	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	184	92.0	200	0.689		
<b>DRO &gt;C10-C28*</b>	<b>178</b>	10.0	11/21/2024	ND	185	92.5	200	0.684		
<b>EXT DRO &gt;C28-C36</b>	<b>38.1</b>	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 93.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 04 0.5' (H247082-04)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2024	ND	2.26	113	2.00	1.50	
Toluene*	<0.050	0.050	11/22/2024	ND	2.17	108	2.00	2.43	
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.16	108	2.00	3.18	
Total Xylenes*	<0.150	0.150	11/22/2024	ND	6.45	107	6.00	3.57	
Total BTEX	<0.300	0.300	11/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4880</b>	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	184	92.0	200	0.689	
<b>DRO &gt;C10-C28*</b>	<b>61.6</b>	10.0	11/21/2024	ND	185	92.5	200	0.684	
<b>EXT DRO &gt;C28-C36</b>	<b>19.0</b>	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 97.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 05 0.5' (H247082-05)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2024	ND	2.26	113	2.00	1.50	
Toluene*	<0.050	0.050	11/22/2024	ND	2.17	108	2.00	2.43	
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.16	108	2.00	3.18	
Total Xylenes*	<0.150	0.150	11/22/2024	ND	6.45	107	6.00	3.57	
Total BTEX	<0.300	0.300	11/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3320</b>	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	184	92.0	200	0.689	
<b>DRO &gt;C10-C28*</b>	<b>18.1</b>	10.0	11/21/2024	ND	185	92.5	200	0.684	
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: CSF - 06 0.5' (H247082-06)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.26	113	2.00	1.50		
Toluene*	<0.050	0.050	11/22/2024	ND	2.17	108	2.00	2.43		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.16	108	2.00	3.18		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	6.45	107	6.00	3.57		
Total BTEX	<0.300	0.300	11/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>6320</b>	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	184	92.0	200	0.689		
<b>DRO &gt;C10-C28*</b>	<b>64.1</b>	10.0	11/21/2024	ND	185	92.5	200	0.684		
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 07 2.5' (H247082-07)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.26	113	2.00	1.50		
Toluene*	<0.050	0.050	11/22/2024	ND	2.17	108	2.00	2.43		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.16	108	2.00	3.18		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	6.45	107	6.00	3.57		
Total BTEX	<0.300	0.300	11/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7040	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	184	92.0	200	0.689		
DRO >C10-C28*	<10.0	10.0	11/21/2024	ND	185	92.5	200	0.684		
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 94.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 08 2.5' (H247082-08)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/21/2024	ND	2.19	109	2.00	7.69	
Toluene*	<0.050	0.050	11/21/2024	ND	2.24	112	2.00	9.46	
Ethylbenzene*	<0.050	0.050	11/21/2024	ND	2.14	107	2.00	9.83	
Total Xylenes*	<0.150	0.150	11/21/2024	ND	6.82	114	6.00	7.81	
Total BTEX	<0.300	0.300	11/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15600	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	14.0	10.0	11/21/2024	ND	184	92.0	200	0.689	
DRO >C10-C28*	681	10.0	11/21/2024	ND	185	92.5	200	0.684	
EXT DRO >C28-C36	113	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: CSF - 09 2.5' (H247082-09)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	7.12	
Toluene*	<0.050	0.050	11/23/2024	ND	2.01	101	2.00	3.67	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	3.84	
<b>Total Xylenes*</b>	<b>0.308</b>	0.150	11/23/2024	ND	6.24	104	6.00	3.26	
<b>Total BTEX</b>	<b>0.308</b>	0.300	11/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>14400</b>	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>15.2</b>	10.0	11/21/2024	ND	184	92.0	200	0.689	
<b>DRO &gt;C10-C28*</b>	<b>599</b>	10.0	11/21/2024	ND	185	92.5	200	0.684	
<b>EXT DRO &gt;C28-C36</b>	<b>202</b>	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: CSF - 10 2.5' (H247082-10)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	7.12		
Toluene*	<0.050	0.050	11/23/2024	ND	2.01	101	2.00	3.67		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	3.84		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.24	104	6.00	3.26		
Total BTEX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>14000</b>	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204		
<b>DRO &gt;C10-C28*</b>	<b>40.0</b>	10.0	11/21/2024	ND	202	101	200	0.726		
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 98.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 11 0.5' (H247082-11)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	7.12	
Toluene*	<0.050	0.050	11/23/2024	ND	2.01	101	2.00	3.67	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	3.84	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.24	104	6.00	3.26	
Total BTEX	<0.300	0.300	11/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4000	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204	
DRO >C10-C28*	304	10.0	11/21/2024	ND	202	101	200	0.726	
EXT DRO >C28-C36	16.7	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 96.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: CSF - 12 0.5' (H247082-12)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	7.12	
Toluene*	<0.050	0.050	11/23/2024	ND	2.01	101	2.00	3.67	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.08	104	2.00	3.84	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.24	104	6.00	3.26	
Total BTEX	<0.300	0.300	11/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8000	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204	
DRO >C10-C28*	11.5	10.0	11/21/2024	ND	202	101	200	0.726	
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: CSF - 13 0.5' (H247082-13)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.40	120	2.00	3.74		
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01		
Total BTEX	<0.300	0.300	11/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>4240</b>	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204		
<b>DRO &gt;C10-C28*</b>	<b>86.6</b>	10.0	11/21/2024	ND	202	101	200	0.726		
<b>EXT DRO &gt;C28-C36</b>	<b>23.2</b>	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 14 0.5' (H247082-14)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.40	120	2.00	3.74		
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01		
Total BTEX	<0.300	0.300	11/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1310	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204		
DRO >C10-C28*	30.4	10.0	11/21/2024	ND	202	101	200	0.726		
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: CSF - 15 0.5' (H247082-15)**

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	11/22/2024	ND	2.40	120	2.00	3.74	
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30	
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60	
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01	
Total BTEX	<0.300	0.300	11/22/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2560</b>	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204	
<b>DRO &gt;C10-C28*</b>	<b>23.6</b>	10.0	11/21/2024	ND	202	101	200	0.726	
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 16 0.5' (H247082-16)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.40	120	2.00	3.74		
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01		
Total BTEX	<0.300	0.300	11/22/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	976	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204		
DRO >C10-C28*	1250	10.0	11/21/2024	ND	202	101	200	0.726		
EXT DRO >C28-C36	35.6	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	11/20/2024	Sampling Date:	11/19/2024
Reported:	11/26/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Alyssa Parras
Project Location:	XTO - EDDY CO NM		

**Sample ID: CSF - 17 0.5' (H247082-17)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.40	120	2.00	3.74		
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01		
Total BTEX	<0.300	0.300	11/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>1660</b>	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204		
<b>DRO &gt;C10-C28*</b>	<b>89.2</b>	10.0	11/21/2024	ND	202	101	200	0.726		
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: CSF - 18 0.5' (H247082-18)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/22/2024	ND	2.40	120	2.00	3.74		
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30		
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60		
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01		
Total BTEX	<0.300	0.300	11/22/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2320	16.0	11/22/2024	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204		
DRO >C10-C28*	<10.0	10.0	11/21/2024	ND	202	101	200	0.726		
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND						

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: N - SW - 01 0-0.5' (H247082-19)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2024	ND	2.40	120	2.00	3.74	
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30	
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60	
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01	
Total BTEX	<0.300	0.300	11/22/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3920</b>	16.0	11/22/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204	
<b>DRO &gt;C10-C28*</b>	<b>24.0</b>	10.0	11/21/2024	ND	202	101	200	0.726	
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: W - SW - 01 0-0.5' (H247082-20)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2024	ND	2.40	120	2.00	3.74	
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30	
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60	
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01	
Total BTEX	<0.300	0.300	11/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4480</b>	16.0	11/22/2024	ND	416	104	400	0.00	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204	
<b>DRO &gt;C10-C28*</b>	<b>14.2</b>	10.0	11/21/2024	ND	202	101	200	0.726	
EXT DRO >C28-C36	<10.0	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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



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**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: E - SW - 01 0-0.5' (H247082-21)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2024	ND	2.40	120	2.00	3.74	
Toluene*	<0.050	0.050	11/22/2024	ND	2.47	123	2.00	3.30	
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.37	119	2.00	3.60	
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.45	124	6.00	3.01	
Total BTEX	<0.300	0.300	11/22/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>13500</b>	16.0	11/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204	
<b>DRO &gt;C10-C28*</b>	<b>128</b>	10.0	11/21/2024	ND	202	101	200	0.726	
<b>EXT DRO &gt;C28-C36</b>	<b>30.8</b>	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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\*=Accredited Analyte

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



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 11/20/2024  
 Reported: 11/26/2024  
 Project Name: PLU 210  
 Project Number: KH247048  
 Project Location: XTO - EDDY CO NM

Sampling Date: 11/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: S - SW - 01 0-0.5' (H247082-22)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2024	ND	2.41	120	2.00	5.05	
Toluene*	<0.050	0.050	11/22/2024	ND	2.45	122	2.00	4.47	
Ethylbenzene*	<0.050	0.050	11/22/2024	ND	2.33	116	2.00	4.17	
Total Xylenes*	<0.150	0.150	11/22/2024	ND	7.31	122	6.00	3.39	
Total BTEX	<0.300	0.300	11/22/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2480</b>	16.0	11/22/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/21/2024	ND	201	101	200	0.204	
<b>DRO &gt;C10-C28*</b>	<b>876</b>	10.0	11/21/2024	ND	202	101	200	0.726	
<b>EXT DRO &gt;C28-C36</b>	<b>21.3</b>	10.0	11/21/2024	ND					

Surrogate: 1-Chlorooctane 96.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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



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Notes and Definitions

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

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







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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

pg 3/5

Project Manager: Austin Worley  
Address: 4526 W. Pierce Street  
City: Carlsbad  
Phone #: 915-262-9701  
Project #: KH247048  
Project Location: PLU 210  
Sampler Name: Eddy  
FOR LAB USE ONLY: Gus Sanchez

Company Name: Terracon  
P.O. #:   
Company: XTO Energy  
Attn: Colton Brown  
Address: 3104 E Greene St.  
City: Carlsbad  
State: NIM, 88220  
Phone #:   
Fax #:

State: NIM Zip: 88220  
Project Owner: XTO Energy

Project Name: PLU 210  
Project Location: Eddy  
Sampler Name: Gus Sanchez

Project Manager: Austin Worley  
Address: 4526 W. Pierce Street  
City: Carlsbad  
Phone #: 915-262-9701  
Project #: KH247048  
Project Location: PLU 210  
Project Name: PLU 210  
Project Location: Eddy  
Sampler Name: Gus Sanchez

Lab I.D.	Depth	Start	End	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chloride (EPA Method 4500)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold		
						GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV										SAMPLING	
19		0	0.5	C	1	X																	
20		0	0.5	C	1	X																	
21		0	0.5	C	1	X																	
22		0	0.5	C	1	X																	

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Relinquished By: [Signature]

Date: 11-20-24  
Time: 11:11  
Received By: [Signature]

Observed Temp: 5.2°C  
Corrected Temp: 5.8°C

Sample Condition: Cool Intact  
Cool Intact: Yes [X] No [ ]  
Cool Intact: Yes [ ] No [X]

Turnaround Time: Standard [ ] Rush [X]

Thermometer ID #413  
Correction Factor: -0.5°C

Verbal Result: Yes [ ] No Add'l Phone #: [ ]

REMARKS: Cost Code: 1137941001

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



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

---

December 16, 2024

AUSTIN WORLEY  
TERRACON CONSULTANTS  
5827 50TH ST. SUITE 1  
LUBBOCK, TX 79424

RE: PLU 210

Enclosed are the results of analyses for samples received by the laboratory on 12/10/24 14:00.

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

TERRACON CONSULTANTS  
 AUSTIN WORLEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/10/2024	Sampling Date:	12/06/2024
Reported:	12/16/2024	Sampling Type:	Soil
Project Name:	PLU 210	Sampling Condition:	Cool & Intact
Project Number:	KH247048	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: CFS - 16.2 0.5' (H247478-01)**

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	12/11/2024	ND	2.05	102	2.00	3.26	
Toluene*	<0.050	0.050	12/11/2024	ND	2.03	102	2.00	3.56	
Ethylbenzene*	<0.050	0.050	12/11/2024	ND	2.03	102	2.00	4.04	
Total Xylenes*	<0.150	0.150	12/11/2024	ND	6.11	102	6.00	4.57	
Total BTEX	<0.300	0.300	12/11/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>768</b>	16.0	12/11/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2024	ND	201	101	200	1.59	
<b>DRO &gt;C10-C28*</b>	<b>493</b>	10.0	12/11/2024	ND	188	93.8	200	0.492	
EXT DRO >C28-C36	<10.0	10.0	12/11/2024	ND					

Surrogate: 1-Chlorooctane 91.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- 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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO:

ANALYS REQUEST

Company Name: Terracon  
 Project Manager: Austin Worley  
 Address: 4526 W. Pierce Street  
 City: Carlsbad  
 Phone #: 5756895949  
 Project #: KH247048  
 Project Name: PLU 210  
 Project Location: Eddy  
 Sampler Name: Becky Sue Meadows

P.O. #: \_\_\_\_\_  
 Company: XTO Energy  
 Attn: Colton Brown  
 Address: 3104 E Green St.  
 City: Carlsbad  
 State: NM, 88220  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_

Lab I.D.	Sample I.D.	Depth		(G)RAB OR (C)OMP	# CONTAINERS	MATRIX							DATE	TIME	Chloride (EPA Method 4500)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold	
		Start	End			GROUNDWAT	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:							ICE / COOL
H347478			0.5	C	1			X						12/06/24	8:04	X	X	X	

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Relinquished By: B Meadows  
 Date: 12-18-24  
 Time: 1400

Received By: [Signature]  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

Observed Temp. 0.3 °C  
 Corrected Temp. -0.3 °C

Sample Condition:  Intact  Cool  Yes  No

Checked By: [Signature] (Initials)

Turnaround Time:  Standard  Rush

Thermometer ID # HTS #140  
 Correction Factor -0.3 °C 79-12/18/24

Verbal Result:  Yes  No Add'l Phone #: \_\_\_\_\_

REMARKS: Cost Code: 2096141001

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

FORM-006 R.3.2 10/07/21

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

Closure Documentation  
PLU 210 | Eddy County, New Mexico  
January 5, 2025 | Terracon Project No. KH247048  
NMOCD Reference ID: nAPP2428245356



## APPENDIX G – TERRACON STANDARD OF CARE, LIMITATION, AND RELIANCE

### Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, XTO Energy.

### Additional Scope Limitations

The development of this Closure Report is based on information provided by XTO Energy and **Terracon's remediation and construction services line. Such information is subject to change** over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those by information provided by XTO Energy. The data, interpretations, findings, and recommendations are based solely upon reformation executed within the scope of these services.

### Reliance

This report has been prepared for the exclusive use of XTO Energy, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of XTO Energy and Terracon. Any unauthorized distribution or reuse is at XTO Energy sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and XTO Energy **and Terracon's Master Services Agreement. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to XTO Energy and all relying parties unless otherwise agreed in writing.**

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

QUESTIONS

Action 418497

**QUESTIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 418497
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2428245356
Incident Name	NAPP2428245356 POKER LAKE UNIT #210 @ 30-015-33593
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-33593] POKER LAKE UNIT #210

**Location of Release Source**

Please answer all the questions in this group.

Site Name	POKER LAKE UNIT #210
Date Release Discovered	10/07/2024
Surface Owner	Federal

**Incident Details**

Please answer all the questions in this group.

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

**Nature and Volume of Release**

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

Crude Oil Released (bbls) Details	Cause: Corrosion   Producing Well   Crude Oil   Released: 2 BBL   Recovered: 0 BBL   Lost: 2 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion   Producing Well   Produced Water   Released: 13 BBL   Recovered: 1 BBL   Lost: 12 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.

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QUESTIONS, Page 2

Action 418497

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 418497
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**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>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 01/08/2025
--	--

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QUESTIONS, Page 3

Action 418497

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 418497
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Site Characterization**

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

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

**Remediation Plan**

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

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

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

Chloride (EPA 300.0 or SM4500 Cl B)	18000
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	17842
GRO+DRO (EPA SW-846 Method 8015M)	14600
BTEX (EPA SW-846 Method 8021B or 8260B)	16.6
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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

On what estimated date will the remediation commence	11/18/2024
On what date will (or did) the final sampling or liner inspection occur	12/06/2024
On what date will (or was) the remediation complete(d)	11/20/2024
What is the estimated surface area (in square feet) that will be reclaimed	3435
What is the estimated volume (in cubic yards) that will be reclaimed	745
What is the estimated surface area (in square feet) that will be remediated	3435
What is the estimated volume (in cubic yards) that will be remediated	120

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

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

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QUESTIONS, Page 4

Action 418497

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 418497
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Remediation Plan (continued)**

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

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

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	LEA LAND LANDFILL [fEEM0112342028]
<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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 01/08/2025
--	--

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

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QUESTIONS, Page 5

Action 418497

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 418497
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

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

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QUESTIONS, Page 6

Action 418497

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 418497
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>408257</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>12/06/2024</b>
What was the (estimated) number of samples that were to be gathered	<b>1</b>
What was the sampling surface area in square feet	<b>200</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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	3435
What was the total volume (cubic yards) remediated	120
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	3435
What was the total volume (in cubic yards) reclaimed	120

Summarize any additional remediation activities not included by answers (above)	<p>"Areas exhibiting visual impact and the area that exceeded the closure criteria were excavated to a depth of between 0.5 feet to 2.5 feet bgs. A total of 23 five-point composite confirmation soil samples were collected from November 19, 2024, through December 6, 2024, and submitted for analysis of BTEX, chloride, and TPH. All but one confirmation sample yielded results for BTEX, chloride, and TPH below applicable NMOCDC closure criteria. Confirmation sample CSF-16 exceeded the closure criteria with 1,250 mg/kg diesel range organics (DRO). This area was resampled on December 6, 2024, allowing two weeks for natural attenuation. The sample results for CSF-16.2 on December 6, 2024, reported TPH to be 493 mg/kg, which is below the applicable NMOCDC closure criteria for this site of 1,000 mg/kg. The excavation was backfilled with imported fill material, leveled off, and compacted. Confirmation sample results are included in Appendix B as Table 2 and Table 3, respectively. A total of approximately 120 cubic yards (cu. yds.) of loose soil were excavated during remedial activities. The excavated material was disposed of at Lea Land Facility. Soil disposal waste manifests are available upon request. A Confirmation Sample Map depicting the floor and wall sample locations and analytical results is included in Appendix A as Exhibit 8, respectively. Photographs of the project site are included in Appendix E. The analytical reports and Chain of Custody (COC) are included in Appendix F. Terracon's Standard of Care, Limitation, and Reliance is included in Appendix G."</p>
---	--

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

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

I hereby agree and sign off to the above statement	<p>Name: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 01/08/2025</p>
--	--

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QUESTIONS, Page 7

Action 418497

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 418497
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

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

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

General Information  
Phone: (505) 629-6116

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

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

CONDITIONS

Action 418497

**CONDITIONS**

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	Action Number: 418497
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2428245356 POKER LAKE UNIT #210, thank you. This Remediation Closure Report is approved.	1/17/2025