



Incident Number: nAPP2513334879

Closure Report

PLU 23 DTD CVB

Section 14, 24 South, 30 East
32.210654, -103.854381

API/Facility ID: fAPP2325847913

County: Eddy, New Mexico

Vertex File Number: 25A-02616

Prepared for:

ExxonMobil Upstream Company

Prepared by:

Vertex Resource Services Inc.

Date:

June 2025

ExxonMobil Upstream Company
PLU 23 DTD CVB

Closure Report
June 2025

Closure Report
PLU 23 DTD CVB
Section 14, 24 South, 30 East
32.210654 -103.854381
API/Facility ID: fAPP2325847913
County: Eddy, New Mexico

Prepared for:
ExxonMobil Upstream Company
3104 East Greene Street
Carlsbad, New Mexico, 88220

Bureau of Land Management
508 West Texas Avenue
Artesia, New Mexico, 88210

Prepared by:
Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad, New Mexico, 88220

A handwritten signature in black ink, appearing to read 'Riley Arnold'.

Riley Arnold ,
FIELD TECHNICIAN, REPORTING

A handwritten signature in black ink, appearing to read 'Chad Hensley'.

Chad Hensley,
B.Sc. GCNR, REPORT REVIEW

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1.0 Introduction

ExxonMobil Upstream Company (ExxonMobil) retained Vertex Resource Services Inc. (Vertex) to conduct a Closure Report for a produced water release that occurred on March 12, 2025, at PLU 23 DTD CVB API fAPP2325847913 (hereafter referred to as the "site"). ExxonMobil submitted an initial C-141 Release Notification to New Mexico Oil Conservation Division (NMOCD) on May 13, 2025. Incident ID number nAPP2513334879 was assigned to this incident.

This report provides a description of the release assessment and remediation activities associated with the site. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for closure of this release, with the understanding that restoration of the release site will be completed at such time as all oil and gas activities are terminated and the site is reclaimed as per NMAC 19.15.29.13.

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2.0 Incident Description

The release occurred on March 12, 2025, due to the loss of power at the battery resulting in condensate coming out the flair. The incident was reported on March 12, 2025 and involved the release of approximately 9 barrels (bbl.) of produced water. Approximately 0 bbl. of free fluid was removed during initial clean-up. Additional details relevant to the release are presented in the C-141 Report.

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3.0 Site Characteristics

Site Direction	19 miles east of Malaga, New Mexico
Section #, Township, Range	Section 14, 24 South and 30 East
Site Location	Rural, Eddy New Mexico
Release Area	on pad
Site Surface Geology	Qa
Predominant Soil Texture	Loamy Sand
Site Current Use	Tank Battery
Surrounding Landscape	uplands, plains, dunes
Elevation	2,800 to 5,000 feet
Climate	8 to 13 inches of precipitation with 221 days frost free
Vegetation	Little to no vegetation
Soil Type	Loamy Sand
Drainage Class	Well drained
Runoff Class	Low
Karst Geology	Low

An aerial photograph and site schematic are presented in Appendices A.

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4.0 Closure Criteria Determination

Table 1. Closure Criteria Determination	
Site Specific Conditions	Value
Site Name: PLU 23 DTD CVB	
Spill Coordinates: 32.210654, -103.854381	
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
A continuously flowing watercourse or any other significant watercourse	Greater than 5 miles
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 mile
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 mile
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 miles
Any other fresh water well or spring	Greater than 5 miles
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 mile
A wetland	Between 1 and 5 mile
A subsurface mine	Greater than 5 miles
An (non-karst) unstable area	Greater than 5 miles
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 miles
Did the release impact areas not on an exploration, development, production, or storage site	No
Requesting a remediation plan approval with this submission	Yes

The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

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Table 2. Closure Criteria for Soils Impacted by a Release

Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
> 100 feet	Chloride	20,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids

TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics

BTEX – benzene, toluene, ethylbenzene and xylenes

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5.0 Remedial Actions Taken

An initial site inspection of the release area was completed on May 12, 2025, which identified the area of the release specified in the initial C-141 Report. The impacted area was determined to be on pad; the total affected area is 1675 square feet. The Daily Field Report associated with the site inspection is included in Appendix E.

Remediation efforts began on June 11, 2025, and were finalised on June 13, 2025, Vertex Personnel supervised the excavation of impacted soils. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility as stipulated by the Form C-138 Request for Approval to Accept Solid Waste.

Notification that confirmatory samples were being collected on June 13, 2025, was provided to the NMOCD. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. A total of 10 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Cardinal Laboratory under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Table 4, Appendix B, and the laboratory data reports are included in Appendix F. The release area was excavated to 3 inches with a combination of hand digging and mechanical excavation to remediate it in compliance with NMAC 19.15.29.12. All confirmatory samples collected and analysed were below closure criteria for the site.

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6.0 Closure Request

The release area was fully delineated and remediated by June 13, 2025. Confirmatory samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release location >100 feet to groundwater.

Based on these findings, Vertex Resource on behalf of ExxonMobil Upstream Company requests that this release be closed.

Should you have any questions or concerns, please do not hesitate to contact Chad Hensley at 575.200.6167 or chensley@vertexresource.com.

7.0 References

Google Inc. (2025). *Google Earth Pro (Version 7.3.3)* [Software]. Retrieved from <https://earth.google.com>

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United States Department of Homeland Security, Federal Emergency Management Agency. (2025). *FEMA Flood Map Service: Search by Address*. Retrieved from <https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20mexico#searchresultsanchor>

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8.0 Limitations

This report has been prepared for the sole benefit of ExxonMobil Upstream Company. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and the Bureau of Land Management, without the express written consent of Vertex Resource Services Inc. (Vertex) and ExxonMobil Upstream Company. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

APPENDIX A: Figures



0 10 20 ft

NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

Map Center:
Lat/Long: 32.210509°N, 103.854579°W
Date: Jun 14/25



Characterization Sample Schematic
PLU 23 DTD CVB

FIGURE:

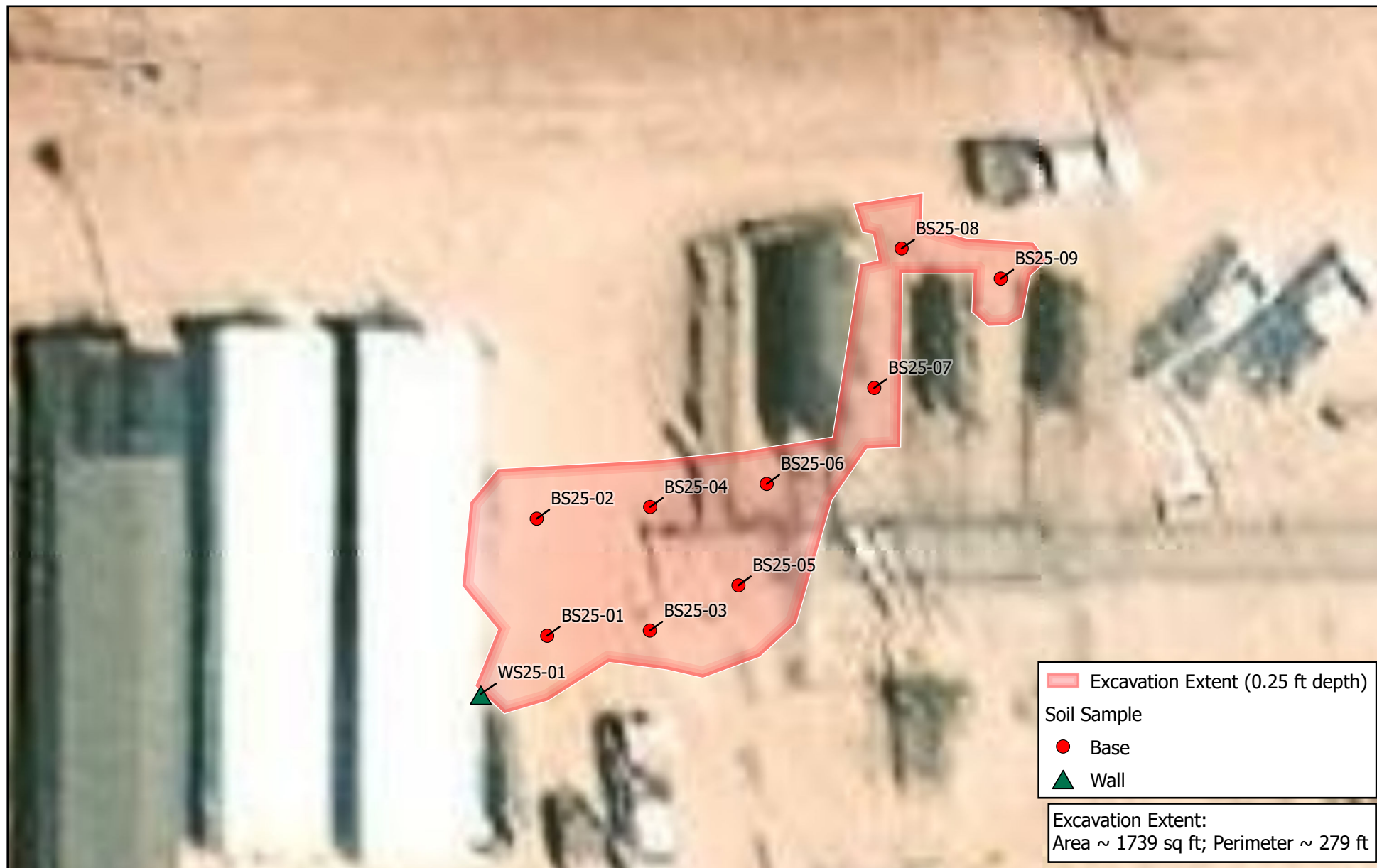
1

ExxonMobil

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

VERSATILITY. EXPERTISE.



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

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APPENDIX B: Tables

Client Name: ExxonMobil Upstream Company

Site Name: PLU 23 DTD CVB

NMOCD Tracking #: NAPP2513334879

Project #: 25A-02616

Lab Report(sX): H253081

Table 3. Initial Characterization Sample and Laboratory Results										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	(GRO + DRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
Depth to Groundwater > 100 feet bgs										
BH25-01	0	May 19, 2025	ND	ND	ND	74	ND	74	ND	16
	2	May 19, 2025	ND	ND	ND	47	ND	47	ND	48
BH25-02	0	May 19, 2025	ND	ND	ND	31	ND	31	ND	48
	1	May 19, 2025	ND	ND	ND	19	ND	19	ND	48
BH25-03	0	May 19, 2025	ND	ND	ND	13	ND	13	ND	80
	1	May 19, 2025	ND	ND	ND	38	ND	38	ND	512
BH25-04	0	May 20, 2025	ND	ND	ND	12	ND	12	ND	ND
	2	May 20, 2025	ND	ND	ND	ND	ND	ND	ND	80
BH25-05	0	May 20, 2025	ND	ND	ND	ND	ND	ND	ND	32
	1	May 20, 2025	ND	ND	ND	ND	ND	ND	ND	80
BH25-06	0	May 21, 2025	ND	ND	ND	ND	ND	ND	ND	32
	1	May 21, 2025	ND	ND	ND	ND	ND	ND	ND	80
BH25-07	0.25	May 21, 2025	ND	ND	ND	ND	ND	ND	ND	12000
BH25-08	0.25	May 21, 2025	ND	ND	ND	ND	ND	ND	ND	10400
SS25-01	0	May 20, 2025	ND	ND	ND	ND	ND	ND	ND	21600
SS25-02	0	May 20, 2025	ND	ND	ND	ND	ND	ND	ND	23600
SS25-03	0	May 20, 2025	ND	ND	ND	ND	ND	ND	ND	15800
SS25-04	0	May 20, 2025	ND	ND	ND	ND	ND	ND	ND	22800
SS25-05	0	May 20, 2025	ND	ND	ND	ND	ND	ND	ND	56800
SS25-06	0	May 21, 2025	ND	ND	ND	ND	ND	ND	ND	24800

"ND" Not Detected at the Reporting Limit

"- " indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Client Name: ExxonMobil Upstream Company

Site Name: PLU 23 DTD CVB

NMOCD Tracking #: NAPP2513334879

Project #: 25A-02616

Lab Report(sX): H253545

Table 4. Confirmatory Sample and Laboratory Results										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)			
Depth to Groundwater > 100 feet bgs										
BS25-01	0.25	June 13, 2025	ND	ND	ND	35	ND	35	35	1550
BS25-02	0.25	June 13, 2025	ND	ND	ND	281	60	281	341	384
BS25-03	0.25	June 13, 2025	ND	ND	ND	73	16	73	89	1920
BS25-04	0.25	June 13, 2025	ND	ND	ND	20	ND	ND	ND	288
BS25-05	0.25	June 13, 2025	ND	ND	ND	ND	ND	ND	ND	5040
BS25-06	0.25	June 13, 2025	ND	ND	ND	16	ND	16	16	1790
BS25-07	0.25	June 13, 2025	ND	ND	ND	ND	ND	ND	ND	10700
BS25-08	0.25	June 13, 2025	ND	ND	ND	ND	ND	ND	ND	8640
BS25-09	0.25	June 13, 2025	ND	ND	ND	ND	ND	ND	ND	11200
WS25-01	0-0.25	June 13, 2025	ND	ND	ND	ND	ND	ND	ND	144

"ND" Not Detected at the Reporting Limit

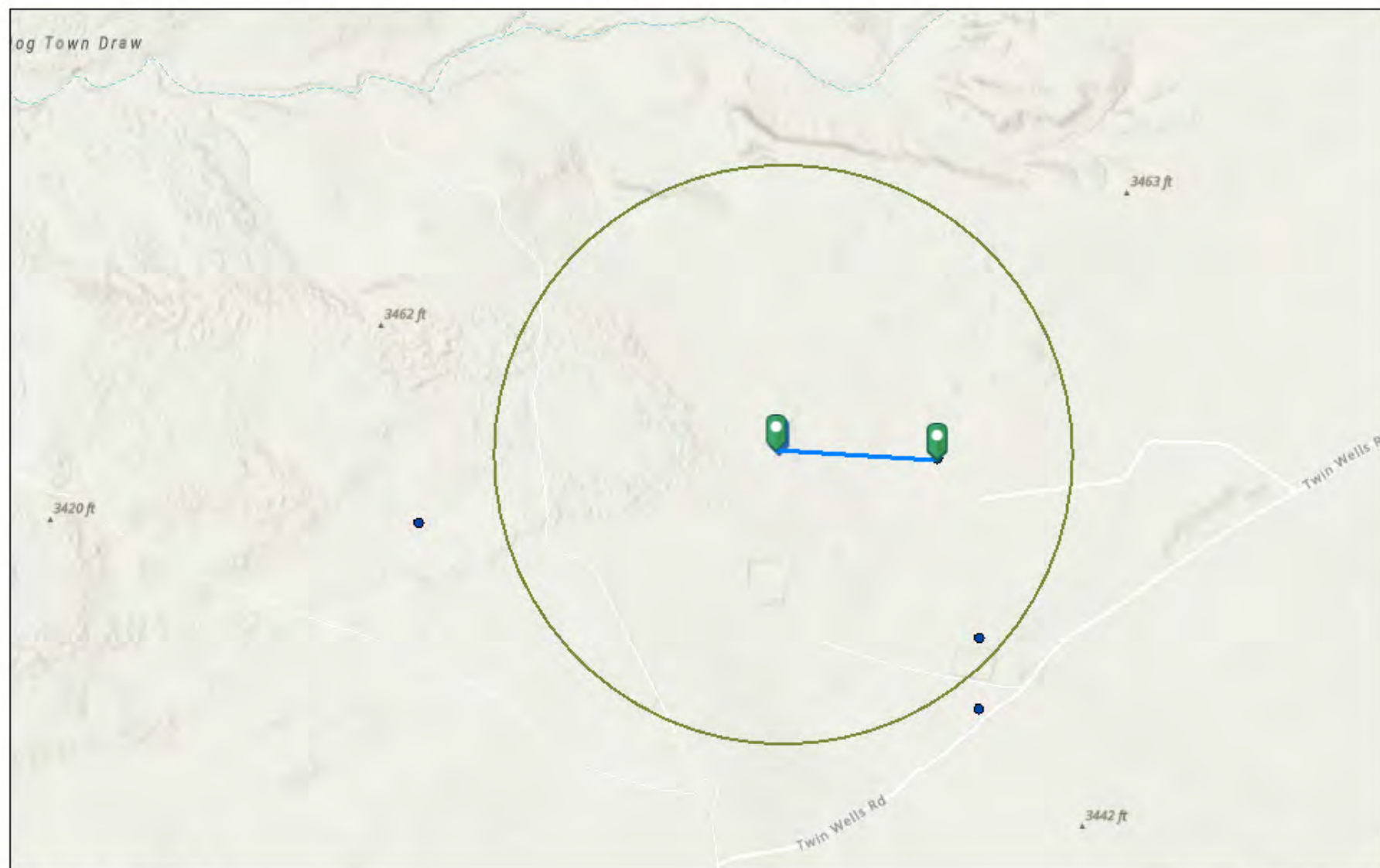
"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

APPENDIX C: Closure Criteria Research Documentation

Closure Criteria Determination			
Site Name: PLU 23 DTD CVB			
Spill Coordinates: 32.210654, -103.854381		X: 607964.83	Y: 3564360.88
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	>105	feet
	Distance between release and nearest DTGW reference	1,508	feet
		0.28	miles
	Date of nearest DTGW reference measurement	January 21, 2022	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	2,721	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	47,949	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	67,395	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	4,633	feet
	ii) Within 1000 feet of any fresh water well or spring	4,633	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	feet
7	Within 300 feet of a wetland	1,194	feet
8	Within the area overlying a subsurface mine	No	feet
	Distance between release and nearest registered mine	52,869	feet
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
	Distance between release and nearest unstable area	25,344	feet
10	Within a 100-year Floodplain	100-500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	2,504	feet
11	Soil Type	Bernio Complex	
12	Ecological Classification	Loamy Sand	
13	Geology	Qep	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	>100'	<50' 51-100' >100'

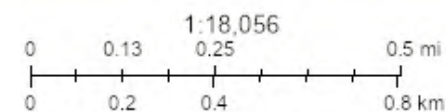
01. PLU 23 DTD CVB 0.28mi from the DTGW Well



5/16/2025, 12:36:40 PM

Override 1

OSE Water PODs



Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map, <http://nm-emrdd.maps.arcgis.com/apps/webappviewer/index.html?id=4d01712306164de29fd2fb9f8f35ca75>, New Mexico Oil Conservation Division



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE OIT JAN 24 2022 PM 3:00

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4575			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 12	SECONDS 38.03 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW NE Sec. 23 T24S R30E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 1-4-2022	DRILLING ENDED 1-4-2022	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 105	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☒ OTHER – SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	105	±8.5	Boring- HSA	--	--	--	--
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						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

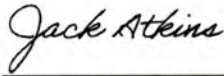
FILE NO. C-4575	POD NO. 1	TRN NO. 709414
LOCATION 2-1-1 24S-30E-23	WELL TAG ID NO. —	PAGE 1 OF 2

MON

USE ON JAN 24 2022 03:00

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	1	1	Caliche, White, Dry	Y ✓ N	
	1	20	19	Sand, very fine grained, well graded, with caliche, Reddish Brown-Light Brown	Y N	
	20	30	20	Caliche, consolidated with silt and some gravel, Off-White, Dry	Y ✓ N	
	30	50	20	Sand, very fine grained, well graded, with gravel, Light Brown	Y ✓ N	
	50	75	25	Sand, very fine grained, well graded, with gravel, Reddish Brown, slight moist	Y ✓ N	
	75	105	30	Sand, very fine grained, poorly graded, Reddish Brown, slight moist	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
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					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
					☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER - SPECIFY:	

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

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 Jackie D. Atkins	1/21/2022
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME	DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4573	POD NO. 1	TRN NO. 709414
LOCATION 2-1-1	245-30E-23	WELL TAG ID NO. MON

PAGE 2 OF 2

OSE_Well Record and Log_-forsign

Final Audit Report

2022-01-22

Created:	2022-01-21
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAHFW29aZiQH1D931B0LxyAz3o1wYi88ri

"OSE_Well Record and Log_-forsign" History



Document created by Lucas Middleton (lucas@atkinseng.com)

2022-01-21 - 10:47:34 PM GMT- IP address: 69.21.248.123

OSE DIT JAN 24 2022 PM 3:00



Document emailed to Jack Atkins (jack@atkinseng.com) for signature

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Agreement completed.

2022-01-22 - 0:16:23 AM GMT



Adobe Sign

Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
NA	C 04575 POD1	NW	NW	NE	23	24S	30E	608411.9	3564355.7	

* UTM location was derived from PLSS - see Help

Driller License:	1249	Driller Company:	ATKINS ENGINEERING ASSOC. INC.		
Driller Name:	ATKINS, JACKIE D.UELENER				
Drill Start Date:	2022-01-04	Drill Finish Date:	2022-01-04	Plug Date:	2022-01-21
Log File Date:	2022-01-24	PCW Rcv Date:		Source:	
Pump Type:		Pipe Discharge Size:		Estimated Yield:	0
Casing Size:	0.00	Depth Well:	105	Depth Water:	

Casing Perforations:

Top	Bottom
0	105

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Water Right Summary



[get image](#)
[list](#)

WR File Number: C 04575		Subbasin: CUB	Cross Reference:
Primary Purpose: MON MONITORING WELL			
Primary Status: PMT Permit			
Total Acres:		Subfile:	Header:
Total Diversion: 0.000		Cause/Case:	
Owner:	XTO ENERGY INC	Owner Class:	Agent
Contact:	ADRIAN BAKER		
Owner:	WSP USA	Owner Class:	User
Contact:	KALEI JENNINGS		

Documents on File

(acre-fee)

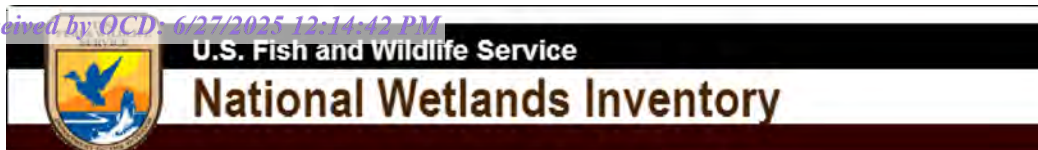
Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion
 get images	709414	EXPL	2021-10-06	PMT	LOG	C 04575 POD1	T	0.000	0.000

Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location Desc
C 04575 POD1	NA		NW	NW	NE	23	24S	30E	608411.9	3564355.7		BH01

* UTM location was derived from PLSS - see Help

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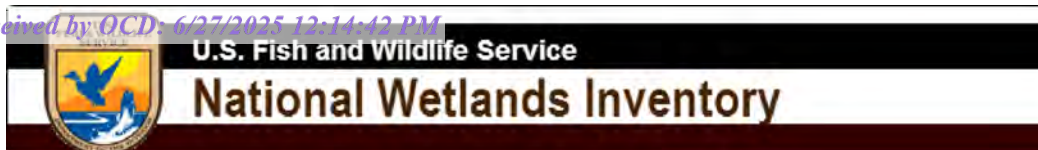
PLU 23 DTD CVB Watercourse 2,721ft



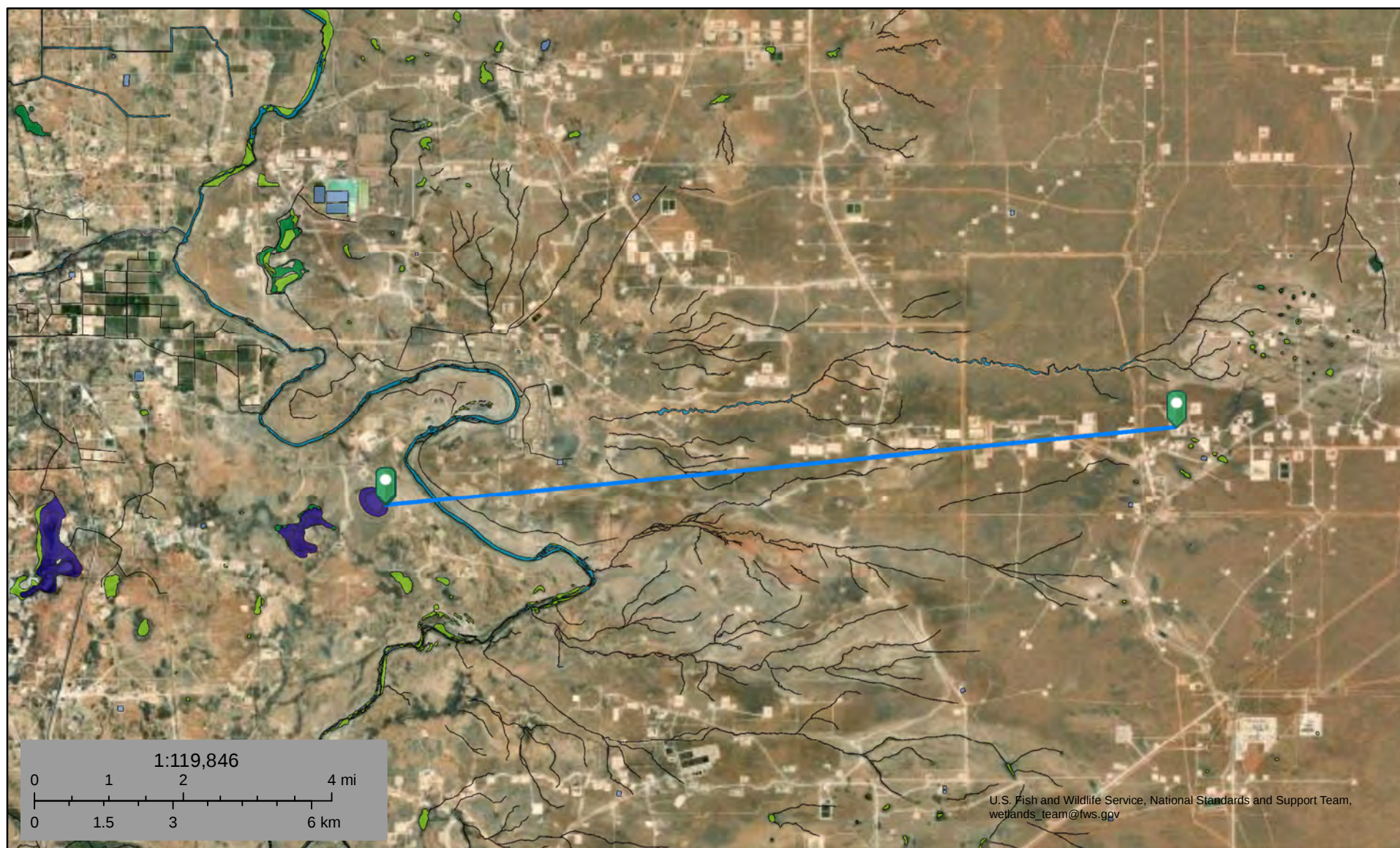
May 16, 2025



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PLU 23 DTD CVB Lake 47,949ft



May 16, 2025



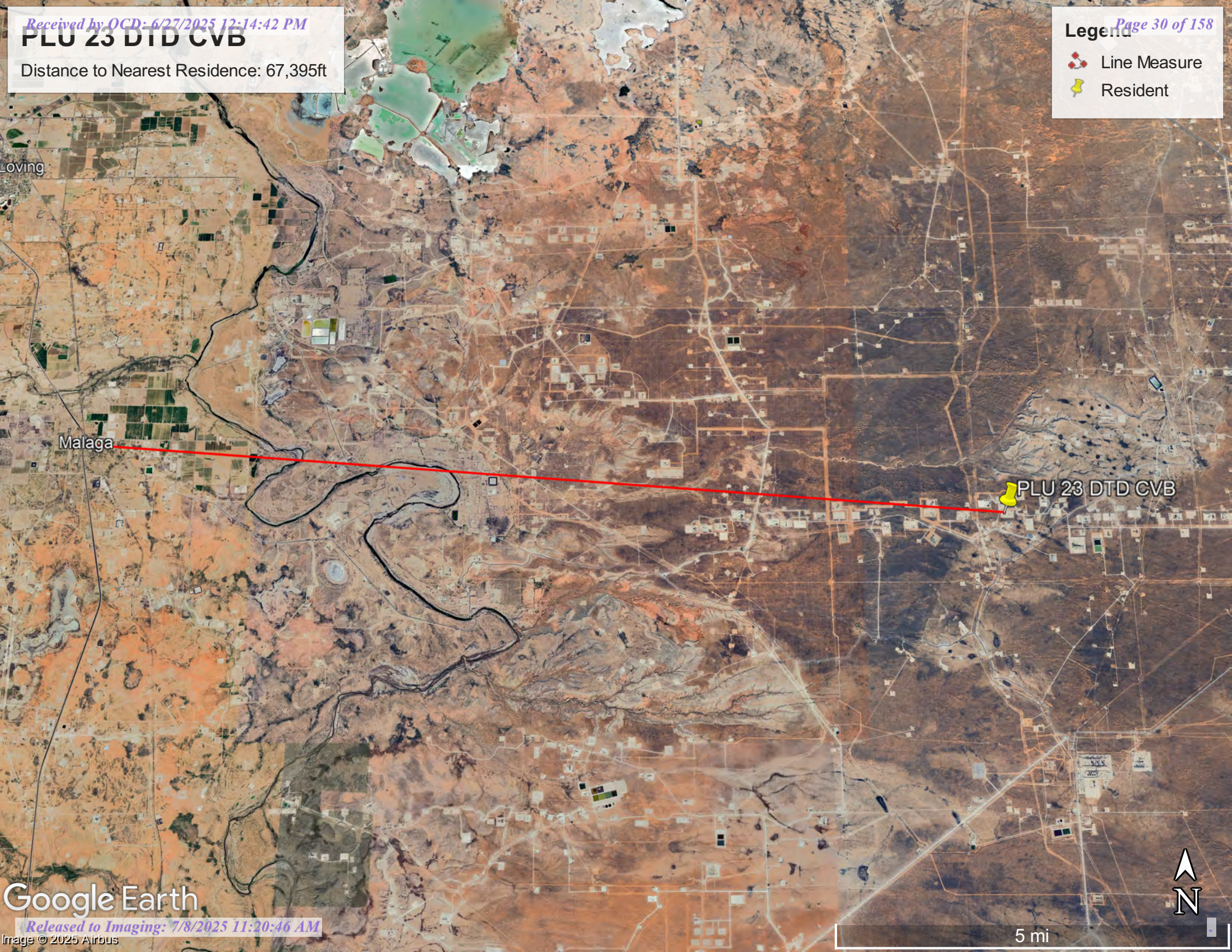
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PLU 23 DTD CVB

Distance to Nearest Residence: 67,395ft

Legend

-  Line Measure
-  Resident



Malaga

PLU 23 DTD CVB



5 mi

Active & Inactive Points of Diversion
(with Ownership Information)

(acre ft per annum)										(R=POD has been replaced and no longer serves this file, C=the file is closed)					(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)					(NAD83 UTM in meters)		(meters)	
WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q64	q16	q4	Sec	Tws	Range	X	Y	Map	Distance			
C 04575	CUB	MON	0.000	XTO ENERGY INC	ED	C 04575.POD1	NA				NW	NW	NE	23	24S	30E	608411.9	3564355.7		447.1			
C 02780	CUB	MON	0.000	U.S. DEPT. OF ENERGY - WIPP	ED	C 02780					NE	SW	NE	23	24S	30E	608535.0	3563857.0 *		760.9			
C 02781	CUB	MON	0.000	U.S. DEPT. OF ENERGY - WIPP	ED	C 02781					SE	SW	NE	23	24S	30E	608535.0	3563657.0 *		905.8			
C 02782	CUB	MON	0.000	U.S. BUREAU OF LAND MANAGEMENT	ED	C 02782					SE	SW	NE	23	24S	30E	608535.0	3563657.0 *		905.8			
C 04911	CUB	MON	0.000	XTO ENERGY, INC	ED	C 04911.POD1	NA				NE	NW	NE	22	24S	30E	606954.0	3564161.5		1,030.3			
C 02110	CUB	STK	3.000	CLARENCE W. MCDONALD	ED	C 02110						SE	SW	23	24S	30E	608036.0	3562950.0 *		1,412.7			
C 04761	CUB	MON	0.000	XTO ENERGY INC.	ED	C 04761.POD1	NA				NE	NW	NE	27	24S	30E	606924.0	3562659.3		1,994.7			
C 03702	CUB	MON	0.000	BOPCO, LP	ED	C 03702.POD1					SE	NW	SE	24	24S	30E	610092.2	3563204.1		2,421.5			
C 01934	C	PRO	0.000	PERRY R BASS	ED	C 01934					NE	NE	NE	16	24S	30E	605664.0	3565821.0 *		2,725.0			
C 03893	CUB	CPS	0.000	DARRELL CRASS DRILLING COMPANY	ED	C 03893.POD1					NW	NW	NE	21	24S	30E	605162.5	3564162.8		2,809.3			
C 02107	C	DOL	0.000	M & M CATTLE CO.	ED	C 02107						SW	NE	21	24S	30E	605174.0	3563706.0 *		2,866.6			
C 03960	C	STK	3.000	BUREAU OF LAND MANAGEMENT	ED	C 03960.POD1		Shallow			NW	SW	NE	21	24S	30E	605061.9	3563712.7		2,974.4			
C 03558	CUB	EXP	0.000	BOPCO, LP	ED	C 03558.POD1					NW	NE	NE	25	24S	30E	610412.5	3562651.7		2,985.4			
					ED	C 03558.POD2					NW	NE	NE	25	24S	30E	610412.5	3562651.7		2,985.4			
					ED	C 03558.POD3					NW	NE	NE	25	24S	30E	610412.5	3562651.7		2,985.4			
					ED	C 03558.POD4					NW	NE	NE	25	24S	30E	610412.5	3562651.7		2,985.4			
					ED	C 03558.POD5					NW	NE	NE	25	24S	30E	610412.5	3562651.7		2,985.4			
C 04478	CUB	MON	0.000	XTO ENERGY INC	ED	C 04478.POD1	NA				SW	SW	NE	25	24S	30E	610077.4	3562041.1		3,137.6			
C 04759	CUB	MON	0.000	XTO ENERGY, INC	ED	C 04759.POD1	NA				SE	NE	NW	19	24S	31E	611452.0	3564087.8		3,497.8			
C 04474	CUB	MON	0.000	XTO ENERGY INC	ED	C 04474.POD1	NA				NW	NW	NW	34	24S	30E	605829.5	3561045.8		3,943.3			
C 04520	C	SAN	1.000	DOUBLE E PIPELINE LLC	ED	C 04520.POD1	20E1C			Shallow	SW	SW	SE	35	24S	30E	608454.0	3559687.6		4,698.8			

Record Count: 21

Filters Applied:

UTM Filters (in meters):

Easting: 607964.83

Northing: 3564360.88

Radius: 5000.0

Sorted By: Distance

* UTM location was derived from PLSS - see Help

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Water Right Summary



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[list](#)

WR File Number:	C 02110	Subbasin:	CUB	Cross Reference:
Primary Purpose:	STK 72-12-1 LIVESTOCK WATERING			
Primary Status:	DCL Declaration			
Total Acres:	0.000	Subfile:	Header:	
Total Diversion:	3.000	Cause/Case:		
Owner:	CLARENCE W. MCDONALD	Owner Class:	Owner	
Contact:				

Documents on File

(acre-feet per

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	C
	199332	DCL	1984-03-01	DCL	PRC	C 02110	T	0.000	3.000	

Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location Desc
C 02110			SE	SW	23	24S	30E	608036.0	3562950.0	*		

* UTM location was derived from PLSS - see Help

Place of Use

Q256	Q64	Q16	Q4	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
							0.000	3.000		STK		DCL	NO PLACE OF USE GIVEN.

Source

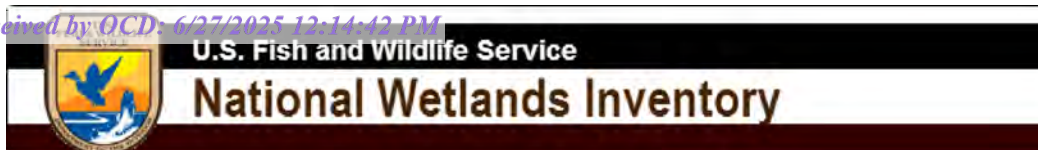
Acres	Diversion	CU	Use	Priority	Source	Description
0.000	3.000		STK		GW	

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5/16/25 4:17 PM MST

Water Rights Summary

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PLU 23 DTD CVB Watercourse 2,721ft

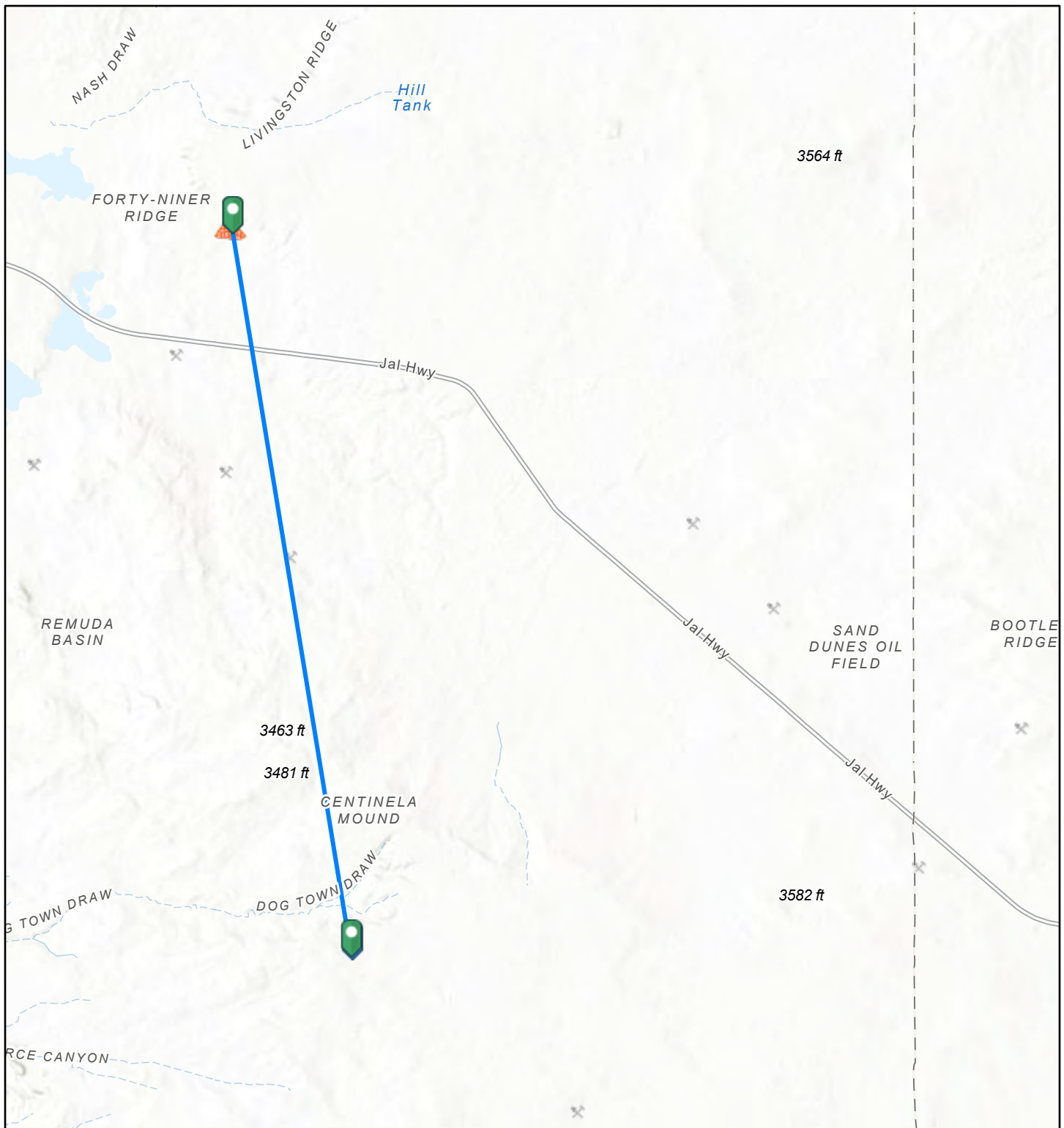


May 16, 2025



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PLU 23 DTD CVB Mine 52,869ft

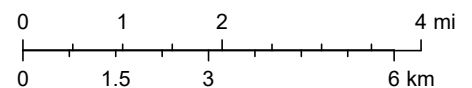


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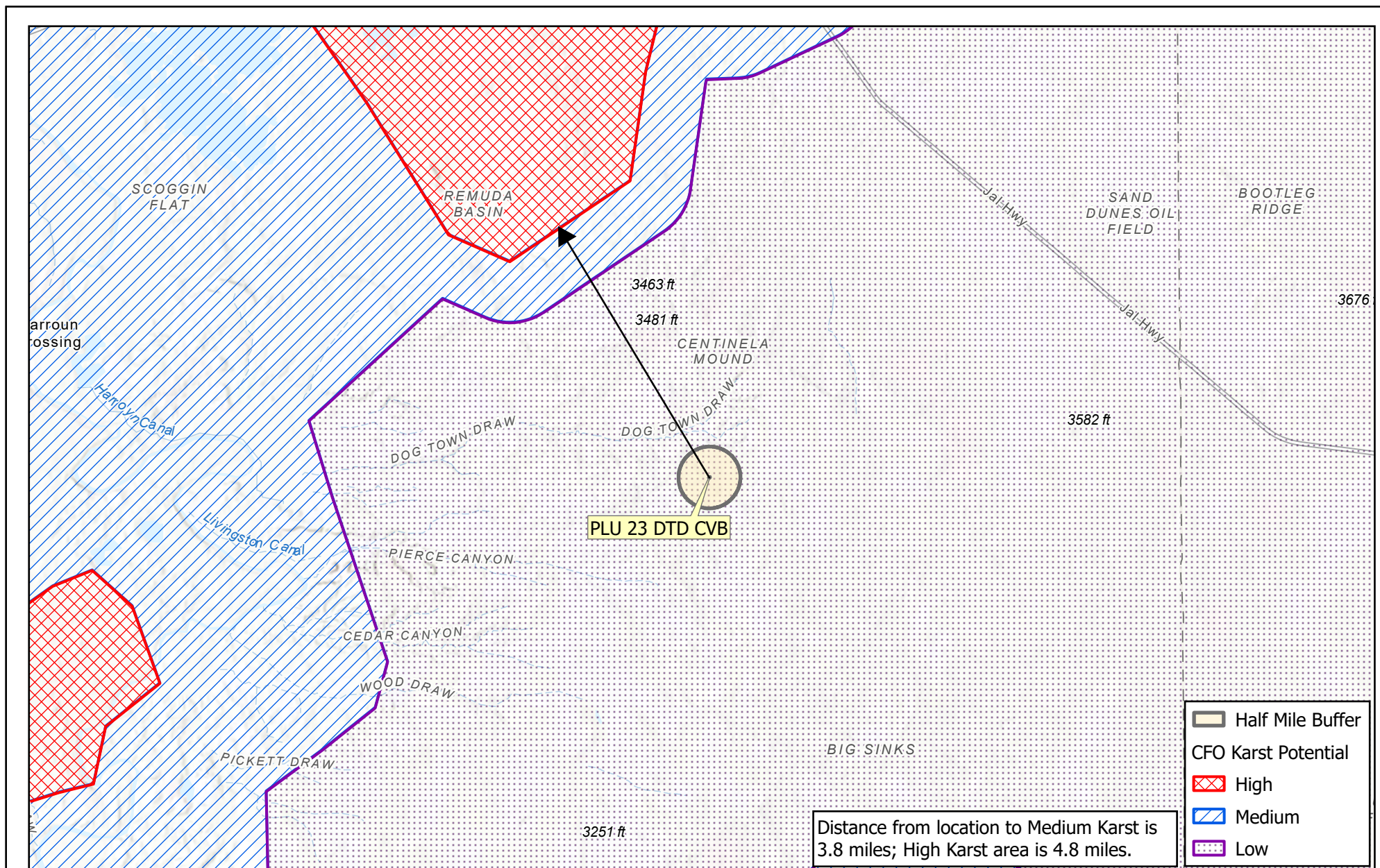
Registered Mines

- ✕ Aggregate, Stone etc.
- ✕ Aggregate, Stone etc.
- ▲ Potash

1:144,448



Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



0 1 2 Miles

NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

Map Center:
Lat/Long: 32.217455°N, 103.856637°W

Date: May 19/25

Karst Potential
PLU 23 DTD CVB

PLATE:

8



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

VERSATILITY. EXPERTISE.

PLU 23 DTD CVB

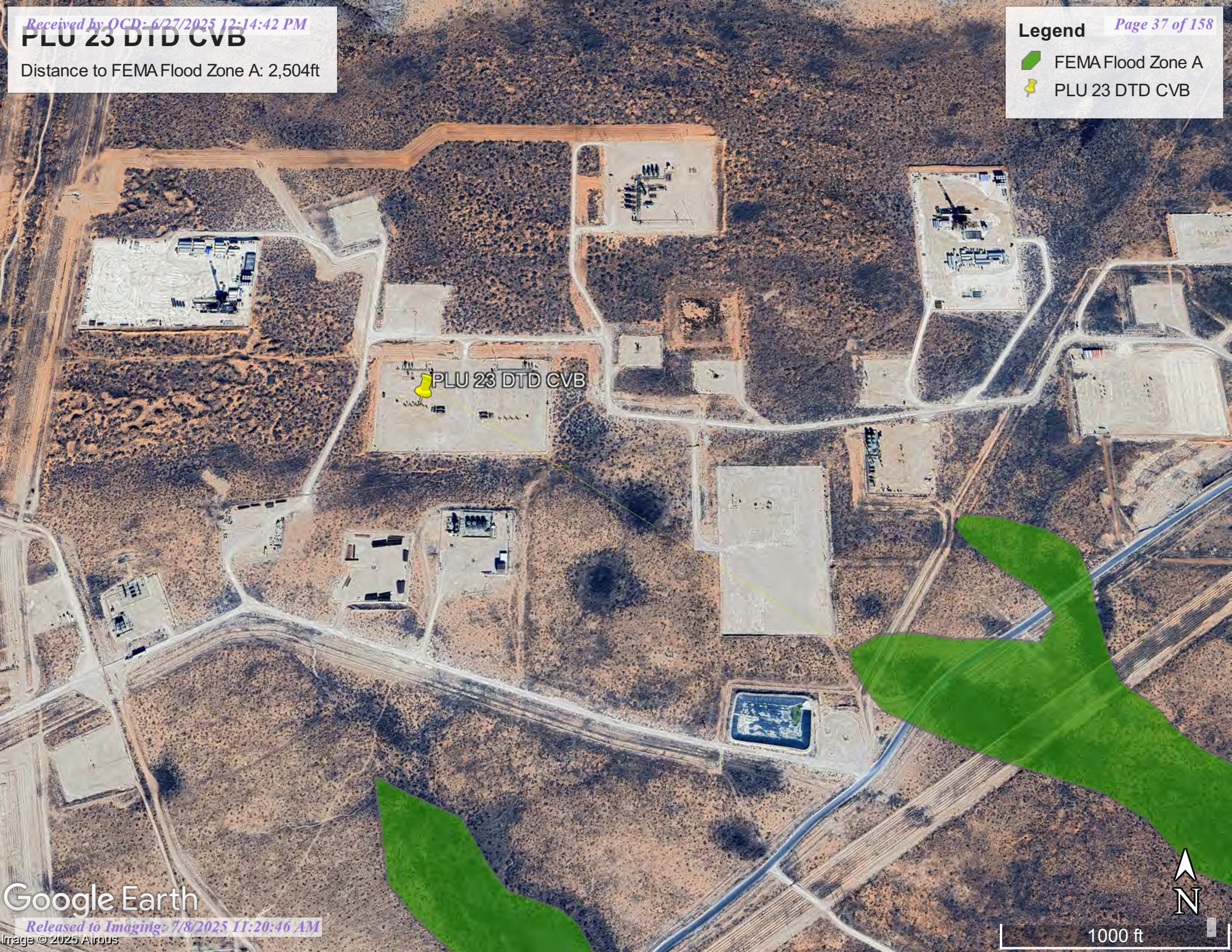
Distance to FEMA Flood Zone A: 2,504ft

Legend

Page 37 of 158

FEMA Flood Zone A

PLU 23 DTD CVB



National Flood Hazard Layer FIRMMette



103°48'36"W 32°6'57"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



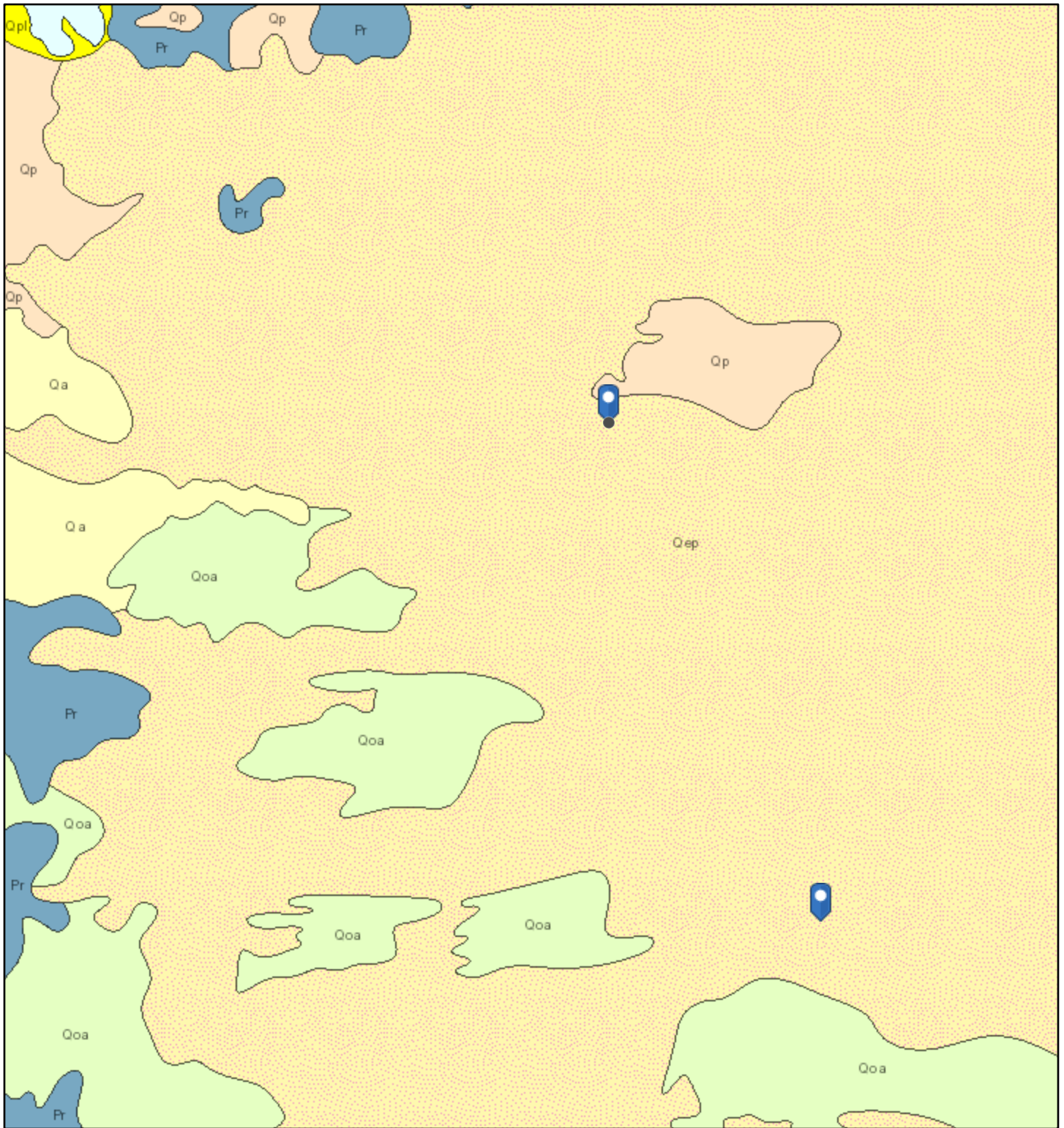
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/16/2025 at 9:45 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

PLU 23 DTD CVB Geology

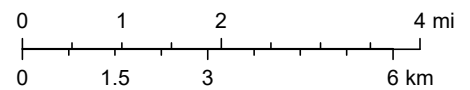


5/16/2025, 4:04:16 PM

1:144,448

Lithologic Units

- Playa—Alluvium and evaporite deposits (Holocene)
- Water—Perennial standing water
- Qa—Alluvium (Holocene to upper Pleistocene)



Esri, NASA, NGA, USGS, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data;

ArcGIS Web AppBuilder



Ecological site R070BD003NM

Loamy Sand

Accessed: 06/18/2025

General information

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Associated sites

R070BD004NM	Sandy Sandy
R070BD005NM	Deep Sand Deep Sand

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site is on uplands, plains, dunes, fan piedmonts and in inter dunal areas. The parent material consists of mixed alluvium and or eolian sands derived from sedimentary rock. Slope range on this site range from 0 to 9 percent with the average of 5 percent.

Low stabilized dunes may occur occasionally on this site. Elevations range from 2,800 to 5,000 feet.

Table 2. Representative physiographic features

Landforms	(1) Fan piedmont (2) Alluvial fan (3) Dune
Elevation	2,800–5,000 ft
Slope	0–9%
Aspect	Aspect is not a significant factor

Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity-short duration thunderstorms.

Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

The average frost-free season is 207 to 220 days. The last killing frost being late March or early April and the first killing frost being in later October or early November.

Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Strong winds blow from the southwest from January through June, which accelerates soil drying during a critical period for cool season plant growth.

Climate data was obtained from <http://www.wrcc.sage.dri.edu/summary/climsmnm.html> web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

Table 3. Representative climatic features

Frost-free period (average)	221 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

Influencing water features

This site is not influenced from water from wetlands or streams.

Soil features

Soils are moderately deep or very deep. Surface textures are loamy fine sand, fine sandy loam, loamy very fine sand or gravelly sandy loam.

Subsurface is a loamy fine sand, coarse sandy loam, fine sandy loam or loam that averages less than 18 percent clay and less than 15 percent carbonates.

Substratum is a fine sandy loam or gravelly fine sandy loam with less than 15 percent gravel and with less than 40 percent calcium carbonate. Some layers high in lime or with caliche fragments may occur at depths of 20 to 30 inches.

These soils, if unprotected by plant cover and organic residue, become wind blown and low hummocks are formed.

Minimum and maximum values listed below represent the characteristic soils for this site.

Characteristic soils are:

Maljamar

Berino

Parjarito

Palomas

Wink

Pyote

Table 4. Representative soil features

Surface texture	(1) Fine sand (2) Fine sandy loam (3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to moderately rapid
Soil depth	40–72 in
Surface fragment cover ≤3"	0–10%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	5–7 in
Calcium carbonate equivalent (0-40in)	3–40%
Electrical conductivity (0-40in)	2–4 mmhos/cm

Sodium adsorption ratio (0-40in)	0–2
Soil reaction (1:1 water) (0-40in)	6.6–8.4
Subsurface fragment volume <=3" (Depth not specified)	4–12%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

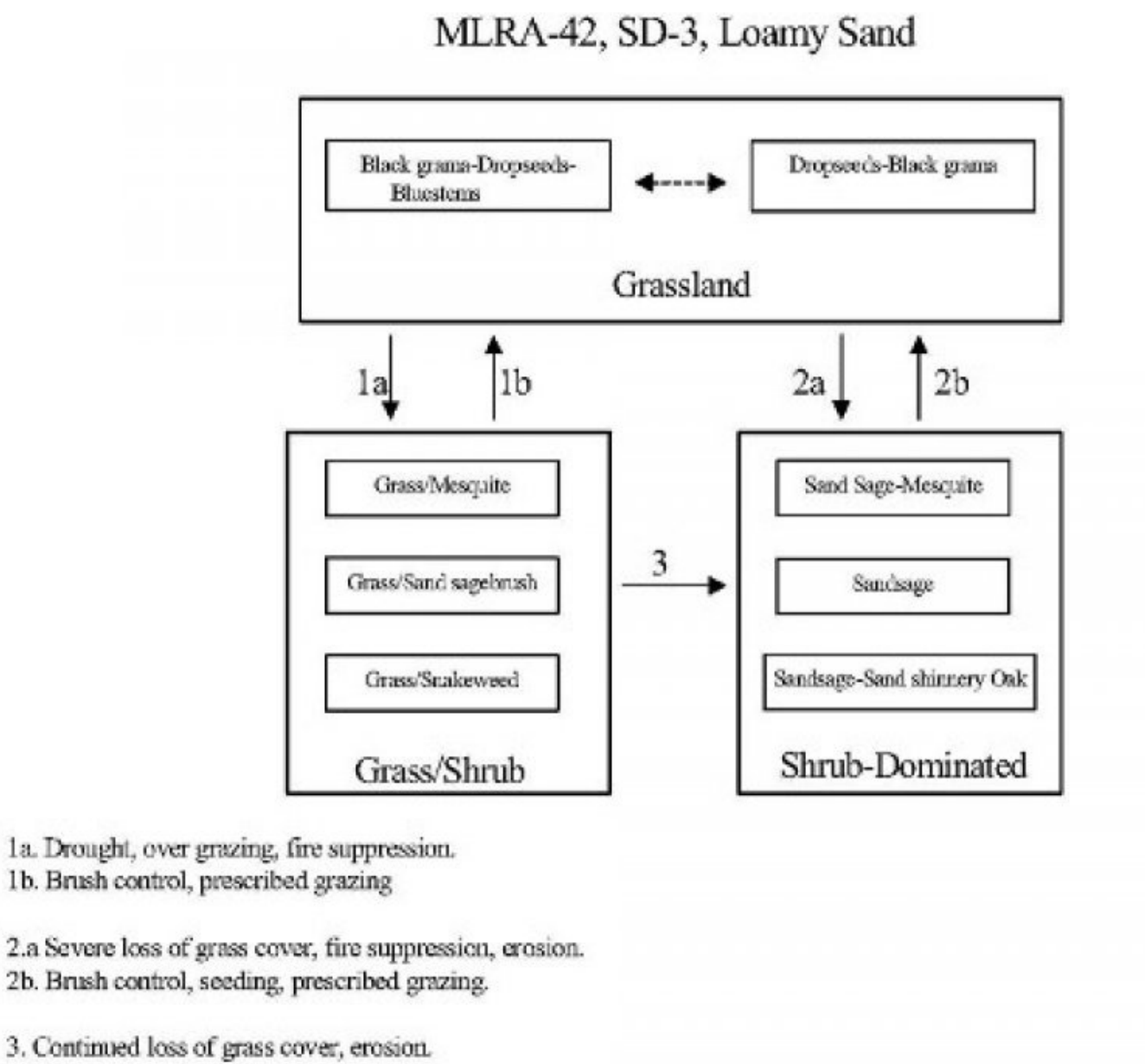
Overview

The Loamy Sand site intergrades with the Deep Sand and Sandy sites (SD-3). These sites can be differentiated by surface soil texture and depth to a textural change. Loamy Sand and Deep Sand sites have coarse textured (sands and loamy sand) surface soils while Sandy sites have moderately coarse textured (sandy loam and fine sandy loam) surfaces. Although Loamy Sand and Deep Sand sites have similar surface textures, the depth to a textural change is different—Loamy Sand sub-surface textures typically increase in clay at approximately 20 to 30 inches, and Deep Sand sites not until around 40 inches.

The historic plant community of Loamy Sand sites is dominated by black grama (*Bouteloua eriopoda*), dropseeds (*Sporobolus flexuosus*, *S. contractus*, *S. cryptandrus*), and bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), with scattered shinnery oak (*Quercus havardii*) and sand sage (*Artemisia filifolia*). Perennial and annual forb abundance and distribution are dependent on precipitation. Litter and to a lesser extent, bare ground, are a significant proportion of ground cover while grasses compose the remainder. Decreases in black grama indicate a transition to either a grass/shrub or shrub-dominated state. The grass/shrub state is composed of grasses/honey mesquite (*Prosopis glandulosa*), grasses/broom snakeweed (*Gutierrezia sarothrae*), or grasses/sand sage. The shrub-dominated state occurs after a severe loss of grass cover and a prevalence of sand sage with secondary shinnery oak and mesquite. Heavy grazing intensity and/or drought are influential drivers in decreasing black grama and bluestems and subsequently increasing shrub cover, erosion, and bare patches. Historical fire suppression also encourages shrub pervasiveness and a competitive advantage over grass species (McPherson 1995). Brush and grazing management, however, may reverse grass/shrub and shrub-dominated states toward the grassland-dominated historic plant community.

State and transition model

Plant Communities and Transitional Pathways (diagram):



State 1
Historic Climax Plant Community

Community 1.1
Historic Climax Plant Community

Grassland: The historic plant community is a uniformly distributed grassland dominated by black grama, dropseeds, and bluestems. Sand sage and shinnery oak are evenly dispersed throughout the grassland due to the coarse soil surface texture. Perennial and annual forbs are common but their abundance and distribution are reflective of precipitation. Bluestems initially, followed by black grama, decrease with drought and heavy grazing intensity. Historical fire frequency is unknown but likely occurred enough to remove small shrubs to the competitive advantage of grass species. Fire suppression, drought conditions, and excessive grazing drive most grass species out of competition with shrub species. Diagnosis: Grassland dominated by black grama, dropseeds, and bluestems. Shrubs, such as sand sage, shinnery oak, and mesquite are dispersed throughout the grassland. Forbs are present and populations fluctuate with precipitation variability.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	442	833	1224
Forb	110	208	306
Shrub/Vine	98	184	270
Total	650	1225	1800

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	28%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	50%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	22%

Figure 5. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC. SD-3 Loamy Sand - Warm season plant community .

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	3	5	10	10	25	30	12	5	0	0

State 2
Grass/Shrub

Community 2.1
Grass/Shrub



Grass/Shrub State: The grass/shrub state is dominated by communities of grasses/mesquite, grasses/snakeweed, or grasses/sand sage. Decreases in black grama and bluestem species lead to an increase in bare patches and mesquite which further competes with grass species. An increase of dropseeds and threeawns occurs. Grass distribution becomes more patchy with an absence or severe decrease in black grama and bluestems. Mesquite provides nitrogen and soil organic matter to co-dominant grasses (Ansley and Jacoby 1998, Ansley et al. 1998). Mesquite mortality when exposed

to fire is low due to aggressive resprouting abilities. Herbicide application combined with subsequent prescribed fire may be more effective in mesquite reduction (Britton and Wright 1971). Diagnosis: This state is dominated by an increased abundance of communities including grass/mesquite, grass/snakeweed, or grass/sand sage. Dropseeds and threeawns have a patchy distribution. Transition to Grass/Shrub State (1a): The historic plant community begins to shift toward the grass/shrub state as drivers such as drought, fire suppression, interspecific competition, and excessive grazing contribute to alterations in soil properties and herbaceous cover. Cover loss and surface soil erosion are initial indicators of transition followed by a decrease in black grama with a subsequent increase of dropseeds, threeawns, mesquite, and snakeweed. Snakeweed has been documented to outcompete black grama especially under conditions of fire suppression and drought (McDaniel et al. 1984). Key indicators of approach to transition: • Loss of black grama cover • Surface soil erosion • Bare patch expansion • Increased dropseed/threeawn and mesquite, snakeweed, or sand sage abundances Transition to Historic Plant Community (1b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community.

State 3

Shrub Dominated

Community 3.1

Shrub Dominated

Shrub-Dominated State: The shrub-dominated state results from a severe loss of grass cover. This state's primary species is sand sage. Shinnery oak and mesquite also occur; however, grass cover is limited to intershrub distribution. Sand sage stabilizes light sandy soils from wind erosion, which enhances protected grass/forb cover (Davis and Bonham 1979). However, shinnery oak also responds to the sandy soils with dense stands due to an aggressive rhizome system. Shinnery oak's extensive root system promotes competitive exclusion of grasses and forbs. Sand sage, shinnery oak, and mesquite can be controlled with herbicide (Herbel et al. 1979, Pettit 1986). Transition to Shrub-Dominated (2a): Severe loss of grass species with increased erosion and fire suppression will result in a transition to a shrub-dominated state with sand sage, Shin oak, and honey mesquite directly from the grassland-dominated state. Key indicators of approach to transition: • Severe loss of grass species cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite abundance Transition to Historic Plant Community (2b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community. In addition, seeding with native grass species will augment the transition to a grassland-dominated state. Transition to Shrub-Dominated (3): If the grass/shrub site continues to lose grass cover with soil erosion, the site will transition to a shrub-dominated state with sand sage, shinnery oak, and honey mesquite. Key indicators of approach to transition: • Continual loss of dropseeds/threeawns cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite/dropseed/threeawn

and mesquite/snakeweed abundance

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass/Grasslike					
1	Warm Season			61–123	
	little bluestem	SCSC	<i>Schizachyrium scoparium</i>	61–123	–
2	Warm Season			37–61	
	sand bluestem	ANHA	<i>Andropogon hallii</i>	37–61	–
3	Warm Season			37–61	
	cane bluestem	BOBA3	<i>Bothriochloa barbinodis</i>	37–61	–
	silver bluestem	BOSA	<i>Bothriochloa saccharoides</i>	37–61	–
4	Warm Season			123–184	
	black grama	BOER4	<i>Bouteloua eriopoda</i>	123–184	–
	bush muhly	MUPO2	<i>Muhlenbergia porteri</i>	123–184	–
5	Warm Season			123–184	
	thin paspalum	PASE5	<i>Paspalum setaceum</i>	123–184	–
	plains bristlegrass	SEVU2	<i>Setaria vulpiseta</i>	123–184	–
	fringed signalgrass	URCI	<i>Urochloa ciliatissima</i>	123–184	–
6	Warm Season			123–184	
	spike dropseed	SPCO4	<i>Sporobolus contractus</i>	123–184	–
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	123–184	–
	mesa dropseed	SPFL2	<i>Sporobolus flexuosus</i>	123–184	–
7	Warm Season			61–123	
	hooded windmill grass	CHCU2	<i>Chloris cucullata</i>	61–123	–
	Arizona cottontop	DICA8	<i>Digitaria californica</i>	61–123	–
9	Other Perennial Grasses			37–61	
	Grass, perennial	2GP	<i>Grass, perennial</i>	37–61	–
Shrub/Vine					
8	Warm Season			37–61	
	New Mexico feathergrass	HENE5	<i>Hesperostipa</i>	37–61	–

			<i>neomexicana</i>		
	giant dropseed	SPGI	<i>Sporobolus giganteus</i>	37–61	–
10	Shrub			61–123	
	sand sagebrush	ARFI2	<i>Artemisia filifolia</i>	61–123	–
	Havard oak	QUHA3	<i>Quercus havardii</i>	61–123	–
11	Shrub			34–61	
	fourwing saltbush	ATCA2	<i>Atriplex canescens</i>	37–61	–
	featherplume	DAFO	<i>Dalea formosa</i>	37–61	–
12	Shrub			37–61	
	jointfir	EPHED	<i>Ephedra</i>	37–61	–
	littleleaf ratany	KRER	<i>Krameria erecta</i>	37–61	–
13	Other Shrubs			37–61	
	Shrub (>.5m)	2SHRUB	<i>Shrub (>.5m)</i>	37–61	–
Forb					
14	Forb			61–123	
	leatherweed	CRPOP	<i>Croton pottsii</i> var. <i>pottsii</i>	61–123	–
	Indian blanket	GAPU	<i>Gaillardia pulchella</i>	61–123	–
	globemallow	SPHAE	<i>Sphaeralcea</i>	61–123	–
15	Forb			12–37	
	woolly groundsel	PACA15	<i>Packera cana</i>	12–37	–
16	Forb			61–123	
	touristplant	DIWI2	<i>Dimorphocarpa wislizeni</i>	61–123	–
	woolly plantain	PLPA2	<i>Plantago patagonica</i>	61–123	–
17	Other Forbs			37–61	
	Forb (herbaceous, not grass nor grass-like)	2FORB	<i>Forb (herbaceous, not grass nor grass-like)</i>	37–61	–

Animal community

This Ecological Site provides habitat which supports a resident animal community that is characterized by pronghorn antelope, desert cottontail, spotted ground squirrel, black-tailed prairie dog, yellow faced pocket gopher, Ord's kangaroo rat, northern grasshopper mouse, southern plains woodrat, badger, roadrunner, meadowlark, burrowing owl, white necked raven, lesser prairie chicken, morning dove, scaled quail, Harris hawk, side blotched lizard, marbled whiptail, Texas horned lizard, western diamondback rattlesnake, dusty hognose snake and ornate box turtle.

Where mesquite has invaded, most resident birds and scissor-tailed flycatcher, morning dove and Swainson's hawk, nest. Vesper and grasshopper sparrows utilize the site during migration.

Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.

Hydrologic Interpretations

Soil Series Hydrologic Group

Berino B

Kinco A

Maljamar B

Pajarito B

Palomas B

Wink B

Pyote A

Recreational uses

This site offers recreation potential for hiking, borseback riding, nature observation, photography and hunting. During years of abundant spring moisture, this site displays a colorful array of wildflowers during May and June.

Wood products

This site has no potential for wood products.

Other products

This site is suitable for grazing by all kinds and classes of livestock at any time of year. In cases where this site has been invaded by brush species it is especially suited for goats. Mismanagement of this site will cause a decrease in species such as the bluestems, black grama, bush muhly, plains bristlegrass, New Mexico feathergrass, Arizona cottontop and fourwing saltbush. A corresponding increase in the dropseeds, windmill grass, fall witchgrass, silver bluestem, sand sagebrush, shiner oak and ephedra will occur. This will also cause an increase in bare ground which will increase soil erodibility. This site will respond well to a system of management that rotates the season of use.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM

100 - 76 2.3 – 3.5

75 – 51 3.0 – 4.5

50 – 26 4.6 – 9.0
25 – 0 9.1 +

Inventory data references

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains, Major Land Resource Areas of New Mexico. This site has been mapped and correlated with soils in the following soil surveys. Eddy County, Lea County, and Chaves County.

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Contributors

Don Sylvester
Quinn Hodgson

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. Number and extent of rills:

2. Presence of water flow patterns:

3. Number and height of erosional pedestals or terracettes:

4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):

5. Number of gullies and erosion associated with gullies:

6. **Extent of wind scoured, blowouts and/or depositional areas:**

7. **Amount of litter movement (describe size and distance expected to travel):**

8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):**

9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):**

10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:**

11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):**

12. **Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):**

Dominant:

Sub-dominant:

Other:

Additional:

13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):**

14. **Average percent litter cover (%) and depth (in):**

15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):**

16. **Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:**

17. **Perennial plant reproductive capability:**



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Natural
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A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Eddy Area, New Mexico



June 18, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 20, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BB	Berino complex, 0 to 3 percent slopes, eroded	6.0	100.0%
Totals for Area of Interest		6.0	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

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Eddy Area, New Mexico**BB—Berino complex, 0 to 3 percent slopes, eroded****Map Unit Setting***National map unit symbol:* 1w43*Elevation:* 2,000 to 5,700 feet*Mean annual precipitation:* 5 to 15 inches*Mean annual air temperature:* 57 to 70 degrees F*Frost-free period:* 180 to 260 days*Farmland classification:* Not prime farmland**Map Unit Composition***Berino and similar soils:* 60 percent*Pajarito and similar soils:* 25 percent*Minor components:* 15 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Berino****Setting***Landform:* Plains, fan piedmonts*Landform position (three-dimensional):* Riser*Down-slope shape:* Convex*Across-slope shape:* Linear*Parent material:* Mixed alluvium and/or eolian sands**Typical profile***H1 - 0 to 17 inches:* fine sand*H2 - 17 to 58 inches:* sandy clay loam*H3 - 58 to 60 inches:* loamy sand**Properties and qualities***Slope:* 0 to 3 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Well drained*Runoff class:* Low*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high
(0.60 to 2.00 in/hr)*Depth to water table:* More than 80 inches*Frequency of flooding:* None*Frequency of ponding:* None*Calcium carbonate, maximum content:* 40 percent*Maximum salinity:* Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 1.0*Available water supply, 0 to 60 inches:* Moderate (about 8.0 inches)**Interpretive groups***Land capability classification (irrigated):* None specified*Land capability classification (nonirrigated):* 7e*Hydrologic Soil Group:* B*Ecological site:* R070BD003NM - Loamy Sand*Hydric soil rating:* No

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Description of Pajarito**Setting**

Landform: Dunes, plains, interdunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 9 inches: loamy fine sand
H2 - 9 to 72 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components**Pajarito**

Percent of map unit: 4 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Wink

Percent of map unit: 4 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Cacique

Percent of map unit: 4 percent
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Kermit

Percent of map unit: 3 percent
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

Custom Soil Resource Report

References

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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX D: Daily Field and Sampling Report(s)



Daily Site Visit Report

Client:	<u>XTO Energy Inc. (US)</u>	Incident ID #:	<u></u>
Site Location Name:	<u>PLU 23 DTD CVB</u>	API #:	<u></u>
Inspection Date:	<u>5/12/2025</u>		<u></u>

Summary of Times

Arrived at Site	<u>5/12/2025 11:00 AM</u>
Departed Site	<u>5/12/2025 3:45 PM</u>

Daily Site Visit Report



Field Notes

- 15:21** Arrived on site and completed safety paperwork
- 15:21** Received authorization before beginning on site
- 15:22** Completed background research in the location to properly identify the current release
- 15:22** Identified the current release on the correct location and characterized the extent
- 15:23** Kicked up the material and identified a hard layer about 3 inches deep coinciding with less saturated soil
- 15:24** Release began near V-80303 and spread southwest
- 15:24** 4 stakes were set for an 811

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: South



Release at the origin

Viewing Direction: South



Release flowed in between V-80303 and V-710301

Viewing Direction: Southwest



Looking over the equipment at the southwest area of the release

Viewing Direction: Northeast



Looking at the release area from the southwest most corner



Daily Site Visit Report

Viewing Direction: Northeast



Southwest corner of the 811

Viewing Direction: Southeast



Northwest corner of the 811 marked

Viewing Direction: Southwest



Northeast corner of 811 marked

Viewing Direction: Southeast



Northwest corner of the 811 marked

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT', written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.

Daily Site Visit Report



Client:	<u>XTO Energy Inc. (US)</u>	Incident ID #:	<u></u>
Site Location Name:	<u>PLU 23 DTD CVB</u>	API #:	<u></u>
Inspection Date:	<u>5/19/2025</u>		<u></u>

Summary of Times

Arrived at Site	<u>5/19/2025 9:15 AM</u>
Departed Site	<u>5/19/2025 2:58 PM</u>

Daily Site Visit Report



Field Notes

- 10:01** Completed safety paperwork upon arrival and received work authorization
- 10:01** Laid out points on field maps
- 10:01** Began with 4 cardinal directions
- 10:06** A secondary sweep was completed in the location of each borehole before bore-holing

Next Steps & Recommendations

1



Daily Site Visit Report

Site Photos

Viewing Direction: South



BH25-01 to 2' as the northern cardinal borehole

Viewing Direction: West



BH25-02 down to 1ft. Refusal was hit at 1ft. At the eastern extent of the visible release

Viewing Direction: North



BH25-03 to 1'. Refusal was hit at 1'. This borehole is the southern extent

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:


Signature



Daily Site Visit Report

Client:	<u>XTO Energy Inc. (US)</u>	Incident ID #:	<u></u>
Site Location Name:	<u>PLU 23 DTD CVB</u>	API #:	<u></u>
Inspection Date:	<u>5/20/2025</u>		<u></u>

Summary of Times

Arrived at Site	<u>5/20/2025 9:29 AM</u>
Departed Site	<u>5/20/2025 2:55 PM</u>

Field Notes

- 10:30** Completed safety paperwork and received work authorization upon arrival
- 10:30** Continued with horizontal boreholes
- 14:02** Each borehole had a secondary sweep done on it before beginning

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: East



BH25-04 to two feet. Western most borehole.
Hit refusal at 2ft

Viewing Direction: South



SS25-01, a surface sample just inside the
release area from BH25-01

Viewing Direction: West



SS25-02, a surface sample just inside the
release area from BH25-02

Viewing Direction: North



SS25-03, a surface sample just inside the
release area from BH25-03



Daily Site Visit Report

Viewing Direction: East



SS25-04, a surface sample just inside the release area from BH25-04

Viewing Direction: South



BH25-05 to 1'. Hit refusal at 1'. A horizontal delineation borehole to the north of the southern section of the release

Viewing Direction: South



SS25-05 just inside the release area from of BH25-05

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT' followed by a stylized '9' or 'g', written over a horizontal line.

Signature



Daily Site Visit Report

Client:	<u>XTO Energy Inc. (US)</u>	Incident ID #:	<u></u>
Site Location Name:	<u>PLU 23 DTD CVB</u>	API #:	<u></u>
Inspection Date:	<u>5/21/2025</u>		<u></u>

Summary of Times

Arrived at Site 5/21/2025 9:28 AM

Departed Site 5/21/2025 1:45 PM

Field Notes

9:38 Completed safety paperwork and received work authorization before beginning

13:39 Collected one horizontal and two verticals

13:42 All boreholes were covered before leaving site. A secondary sweep was conducted at each borehole

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: West



BH25-06 to 1'. Hit refusal at 1'. Horizontal

Viewing Direction: North



BH25-07 to .5'. This sample is a vertical in the southwest area of the release

Viewing Direction: South



BH25-08 to .5'. This sample is a vertical in the northeastern area of the release

Viewing Direction: East



SS25-06 step into the release area from BS25-06

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT' or similar, written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.

Daily Site Visit Report



Client:	<u>XTO Energy Inc. (US)</u>	Incident ID #:	<u></u>
Site Location Name:	<u>Hat Mesa 31 State 002</u>	API #:	<u></u>
Inspection Date:	<u>6/5/2025</u>		<u></u>

Summary of Times

Arrived at Site	<u>6/5/2025 9:00 AM</u>
Departed Site	<u>6/5/2025 4:00 PM</u>

Daily Site Visit Report



Field Notes

10:19 811 flags were staked and gps coordinates collected

10:24 NW: 32.535225, -103.696513

NE: 32.535255, - 103.695766

SW:32.534825, -103. 696528

SE: 32.534832, -103.695714

10:24 Drilling rig was repaired and drilling continued

15:12 105' depth was reached/ measurements were taken to prove well depth

Next Steps & Recommendations

1 Detect for ground water after 72hr wait period

2 Plug well

Daily Site Visit Report



Site Photos

Viewing Direction: Northwest



Descriptive Photo - 1
Viewing Direction: Northwest
Date: 6/11 South east corner
Created: 6/5/2025 10:06:18 AM
Lat:32.534825, Long:-103.695731

811 South east corner

Viewing Direction: Southwest



Descriptive Photo - 2
Viewing Direction: Southwest
Date: 6/11 North east corner
Created: 6/5/2025 10:10:31 AM
Lat:32.535254, Long:-103.695759

811 North east corner

Viewing Direction: Southeast



Descriptive Photo - 3
Viewing Direction: Southeast
Date: 6/11 North west corner
Created: 6/5/2025 10:14:15 AM
Lat:32.535025, Long:-103.695697

811 North west corner

Viewing Direction: Northeast



Descriptive Photo - 4
Viewing Direction: Northeast
Date: 6/11 South west corner
Created: 6/5/2025 10:15:12 AM
Lat:32.534825, Long:-103.695682

811 South west corner



Daily Site Visit Report

Viewing Direction: North  Descriptive Photo - 5 Viewing Direction: North Desc: Bore depth 109 and 6/10 with casing above Created: 6/5/2025 3:16:21 PM Lat:32.535238, Long: -103.595894 Bore depth 109 and 6/10 with casing above ground	Viewing Direction: North  Descriptive Photo - 6 Viewing Direction: North Desc: Length of casing above ground Created: 6/5/2025 3:20:04 PM Lat:32.535238, Long: -103.595894 Length of casing above surface 3' and 8/10th
Viewing Direction: West  Descriptive Photo - 7 Viewing Direction: West Desc: Total well depth Created: 6/5/2025 3:34:05 PM Lat:32.535238, Long: -103.595894 Total well depth 105.8'	Viewing Direction: North  Descriptive Photo - 8 Viewing Direction: North Desc: Lithology Created: 6/5/2025 3:35:13 PM Lat:32.535238, Long: -103.595894 Lithology



Daily Site Visit Report

Viewing Direction: North



Borehole secured

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:


Signature



Daily Site Visit Report

Client:	<u>XTO Energy Inc. (US)</u>	Incident ID #:	<u></u>
Site Location Name:	<u>PLU 23 DTD CVB</u>	API #:	<u></u>
Inspection Date:	<u>6/10/2025</u>		<u></u>

Summary of Times

Arrived at Site	<u>6/10/2025 9:35 AM</u>
Departed Site	<u>6/10/2025 10:42 AM</u>

Field Notes

- 9:36** Completed safety paperwork and received work authorization upon arrival
- 9:36** Marked the site out in white and with flagging for the areas that need to be excavated
- 10:42** Checked that that stakes for the 811 are still in place and that the coordinates are correct

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: North



Descriptive Photo - 1
Viewing Direction: North
Description: Area flagged with white flags
Created: 6/10/2025 10:27:51 AM
Lat:32.215385, Long:-103.864844

Area flagged with white flags

Viewing Direction: East



Descriptive Photo - 2
Viewing Direction: East
Description: Area flagged with white flags
Created: 6/10/2025 10:28:14 AM
Lat:32.215385, Long:-103.864736

Area flagged with white flags

Viewing Direction: Southeast



Descriptive Photo - 3
Viewing Direction: Southeast
Description: Area flagged with white flags
Created: 6/10/2025 10:28:31 AM
Lat:32.215385, Long:-103.864828

Area flagged with white flags

Viewing Direction: Southwest



Descriptive Photo - 4
Viewing Direction: Southwest
Description: Area in north of release area flagged with white flags
Created: 6/10/2025 10:27:48 AM
Lat:32.215385, Long:-103.864437

Area in north of release area flagged with white flags



Daily Site Visit Report

Viewing Direction: South



Area in north of release area flagged with white flags

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT', written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.



Daily Site Visit Report

Client:	<u>XTO Energy Inc. (US)</u>	Incident ID #:	<u></u>
Site Location Name:	<u>PLU 23 DTD CVB</u>	API #:	<u></u>
Inspection Date:	<u>6/10/2025</u>		<u></u>

Summary of Times

Arrived at Site	<u>6/10/2025 9:35 AM</u>
Departed Site	<u>6/10/2025 10:42 AM</u>

Field Notes

- 9:36** Completed safety paperwork and received work authorization upon arrival
- 9:36** Marked the site out in white and with flagging for the areas that need to be excavated
- 10:42** Checked that that stakes for the 811 are still in place and that the coordinates are correct

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: North



Descriptive Photo - 1
Viewing Direction: North
Area: Area flagged with white flags
Created: 6/10/2025 10:27:51 AM
Lat:32.215385, Long:-103.864844

Area flagged with white flags

Viewing Direction: East



Descriptive Photo - 2
Viewing Direction: East
Area: Area flagged with white flags
Created: 6/10/2025 10:28:14 AM
Lat:32.215385, Long:-103.864736

Area flagged with white flags

Viewing Direction: Southeast



Descriptive Photo - 3
Viewing Direction: Southeast
Area: Area flagged with white flags
Created: 6/10/2025 10:28:31 AM
Lat:32.215385, Long:-103.864828

Area flagged with white flags

Viewing Direction: Southwest



Descriptive Photo - 4
Viewing Direction: Southwest
Area: Area in north of release area flagged with white flags
Created: 6/10/2025 10:27:48 AM
Lat:32.215385, Long:-103.864837

Area in north of release area flagged with white flags



Daily Site Visit Report

Viewing Direction: South



Area in north of release area flagged with white flags

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT', written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.



Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Incident ID #:	
Site Location Name:	PLU 23 DTD CVB	API #:	
Inspection Date:	6/12/2025		

Summary of Times

Arrived at Site	6/12/2025 9:00 AM
Departed Site	6/12/2025 3:57 PM

Field Notes

- 10:18** Completed safety paperwork, had a safety meeting, and received work authorization before arrival
- 10:18** Crew continued hand digging the release area
- 10:19** Field screened the area hand dug the day prior to determine if adequate remediation has commenced
- 15:38** Samples were field screened in the same locations that confirmation samples intend to be taken to confirm the grids are clean
- 15:38** Area was fully excavated and all sections were field screened
- 15:42** Areas under equipment were able to be effectively scraped due to the equipment being raised and the release being shallow.
Therefore deferral will not be needed

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: Southwest



BS25-07 at .25'.

Viewing Direction: Southwest



BS25-08 at .25'.

Viewing Direction: South



BS25-09 at .25'.

Viewing Direction: South



WS25-03 0-2.5. Around base samples 7-9



Daily Site Visit Report

Viewing Direction: Northeast



BS25-06 field screened from in between the equipment

Viewing Direction: Northeast



BS25-06 field screened in between the equipment

Viewing Direction: East



BS25-01 to BS25-05 taken from the southern area of the excavation for field screening

Viewing Direction: East



Wall samples 1,2, and 4 taken around the southern area and equipment for field screening



Daily Site Visit Report

Viewing Direction: Northeast



Area scraped under equipment

Viewing Direction: Northeast



Hydrovac hole filled

Viewing Direction: Southeast



Area under equipment scraped

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:


Signature



Daily Site Visit Report

Client: XTO Energy Inc. (US)
Site Location Name: PLU 23 DTD CVB
Inspection Date: 6/13/2025

Incident ID #: _____
API #: _____

Summary of Times

Arrived at Site 6/13/2025 11:30 AM
Departed Site 6/13/2025 2:03 PM

Field Notes

- 13:41** Completed safety paperwork and received work authorization upon arrival
- 13:41** Collected base samples 1-13 and wall sample 1
- 13:42** Due to the shallow excavation, the square-footage of wall is <200sq ft, therefore only one wall sample is needed
- 13:43** BS25-06 was taken underneath the scraped equipment, demonstrating the scrape was effective and no deferral is needed
- 13:44** Full photographs of the final remediation excavation are included
- 15:34** Dropped samples off directly at cardinal

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: East



Base Samples 1-5

Viewing Direction: East



BS25-06 taken underneath the equipment

Viewing Direction: South



BS25-07 taken west of the release separator

Viewing Direction: Southwest



BS25-08 taken north and west of the release point separator



Daily Site Visit Report

Viewing Direction: South



BS25-09 taken north and east of the release separators

Viewing Direction: Southwest



Area under pipes scraped

Viewing Direction: South



Southern excavation scrape

Viewing Direction: Northwest



Southern excavation scrape

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:


Signature

APPENDIX E: Laboratory Data Report(s) and Chain of Custody Form(s)



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

May 29, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: PLU 23 DTD CVB

Enclosed are the results of analyses for samples received by the laboratory on 05/22/25 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/19/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 01 @ 0' (H253081-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2025	ND	2.03	101	2.00	1.89	
Toluene*	<0.050	0.050	05/23/2025	ND	2.14	107	2.00	2.49	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	2.11	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.47	108	6.00	2.22	
Total BTEX	<0.300	0.300	05/23/2025	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
Chloride	16.0	16.0	05/27/2025	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	74.4	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 104 % 44.4-145

Surrogate: 1-Chlorooctadecane 106 % 40.6-153

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:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/19/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 01 @ 2' (H253081-02)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2025	ND	2.03	101	2.00	1.89	
Toluene*	<0.050	0.050	05/23/2025	ND	2.14	107	2.00	2.49	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	2.11	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.47	108	6.00	2.22	
Total BTX	<0.300	0.300	05/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	46.5	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 105 % 44.4-145

Surrogate: 1-Chlorooctadecane 107 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 05/22/2025
 Reported: 05/29/2025
 Project Name: PLU 23 DTD CVB
 Project Number: 25A - 02616
 Project Location: EXXON MOBIL

Sampling Date: 05/19/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 02 @ 0' (H253081-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2025	ND	2.03	101	2.00	1.89	
Toluene*	<0.050	0.050	05/23/2025	ND	2.14	107	2.00	2.49	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	2.11	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.47	108	6.00	2.22	
Total BTEX	<0.300	0.300	05/23/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	31.0	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 102 % 44.4-145

Surrogate: 1-Chlorooctadecane 102 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/19/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 02 @ 1' (H253081-04)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2025	ND	2.03	101	2.00	1.89	
Toluene*	<0.050	0.050	05/23/2025	ND	2.14	107	2.00	2.49	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	2.11	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.47	108	6.00	2.22	
Total BTEX	<0.300	0.300	05/23/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/27/2025	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	19.4	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 85.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 85.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 05/22/2025
 Reported: 05/29/2025
 Project Name: PLU 23 DTD CVB
 Project Number: 25A - 02616
 Project Location: EXXON MOBIL

Sampling Date: 05/19/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 03 @ 0' (H253081-05)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2025	ND	2.03	101	2.00	1.89		
Toluene*	<0.050	0.050	05/23/2025	ND	2.14	107	2.00	2.49		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	2.11		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.47	108	6.00	2.22		
Total BTEX	<0.300	0.300	05/23/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	12.7	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 97.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 97.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/19/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 03 @ 1' (H253081-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEX	<0.300	0.300	05/23/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	512	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	38.0	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 91.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.1 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 04 @ 0' (H253081-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEX	<0.300	0.300	05/23/2025	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	
Chloride	<16.0	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	11.7	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 102 % 44.4-145

Surrogate: 1-Chlorooctadecane 103 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 05/22/2025
 Reported: 05/29/2025
 Project Name: PLU 23 DTD CVB
 Project Number: 25A - 02616
 Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 04 @ 2' (H253081-08)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2025	ND	2.09	105	2.00	4.42	
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38	
Total BTEX	<0.300	0.300	05/23/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 113 % 44.4-145

Surrogate: 1-Chlorooctadecane 115 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 05 @ 0' (H253081-09)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2025	ND	2.09	105	2.00	4.42	
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38	
Total BTEx	<0.300	0.300	05/23/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 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	32.0	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 112 % 44.4-145

Surrogate: 1-Chlorooctadecane 113 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 05 @ 1' (H253081-10)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEX	<0.300	0.300	05/23/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 114 % 44.4-145

Surrogate: 1-Chlorooctadecane 116 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 05/22/2025
 Reported: 05/29/2025
 Project Name: PLU 23 DTD CVB
 Project Number: 25A - 02616
 Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SS 25 - 01 (H253081-11)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2025	ND	2.09	105	2.00	4.42	
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38	
Total BTEX	<0.300	0.300	05/23/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	21600	16.0	05/27/2025	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 111 % 44.4-145

Surrogate: 1-Chlorooctadecane 113 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SS 25 - 02 (H253081-12)

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	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEX	<0.300	0.300	05/23/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	23600	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 105 % 44.4-145

Surrogate: 1-Chlorooctadecane 104 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 05/22/2025
 Reported: 05/29/2025
 Project Name: PLU 23 DTD CVB
 Project Number: 25A - 02616
 Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SS 25 - 03 (H253081-13)

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	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEX	<0.300	0.300	05/23/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	15800	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	213	107	200	1.79	
DRO >C10-C28*	70.7	10.0	05/23/2025	ND	198	99.2	200	0.0192	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 109 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SS 25 - 04 (H253081-14)

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	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEx	<0.300	0.300	05/23/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	22800	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	182	90.8	200	1.65	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	175	87.5	200	2.85	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 108 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 05/22/2025
 Reported: 05/29/2025
 Project Name: PLU 23 DTD CVB
 Project Number: 25A - 02616
 Project Location: EXXON MOBIL

Sampling Date: 05/20/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SS 25 - 05 (H253081-15)

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	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEX	<0.300	0.300	05/23/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	56800	16.0	05/27/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	182	90.8	200	1.65	
DRO >C10-C28*	10.3	10.0	05/23/2025	ND	175	87.5	200	2.85	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 95.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 101 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/21/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 06 @ 0' (H253081-16)

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	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEx	<0.300	0.300	05/23/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	05/27/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	182	90.8	200	1.65	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	175	87.5	200	2.85	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 97.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 101 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/21/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 06 @ 1' (H253081-17)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTX	<0.300	0.300	05/23/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/27/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	182	90.8	200	1.65	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	175	87.5	200	2.85	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 110 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/21/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 07 @ 0.25' (H253081-18)

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	05/23/2025	ND	2.09	105	2.00	4.42		
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82		
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86		
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38		
Total BTEX	<0.300	0.300	05/23/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 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	12000	16.0	05/27/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	182	90.8	200	1.65	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	175	87.5	200	2.85	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 97.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 100 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/21/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BH25 - 08 @ 0.25' (H253081-19)

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	05/23/2025	ND	2.09	105	2.00	4.42	
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38	
Total BTEX	<0.300	0.300	05/23/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10400	16.0	05/27/2025	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	182	90.8	200	1.65	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	175	87.5	200	2.85	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 90.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 05/22/2025
Reported: 05/29/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL

Sampling Date: 05/21/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: SS 25 - 06 0' (H253081-20)

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	05/23/2025	ND	2.09	105	2.00	4.42	
Toluene*	<0.050	0.050	05/23/2025	ND	2.09	104	2.00	3.82	
Ethylbenzene*	<0.050	0.050	05/23/2025	ND	2.11	106	2.00	4.86	
Total Xylenes*	<0.150	0.150	05/23/2025	ND	6.60	110	6.00	4.38	
Total BTEX	<0.300	0.300	05/23/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	24800	16.0	05/27/2025	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2025	ND	182	90.8	200	1.65	
DRO >C10-C28*	<10.0	10.0	05/23/2025	ND	175	87.5	200	2.85	
EXT DRO >C28-C36	<10.0	10.0	05/23/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 110 % 40.6-153

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Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 23 of 25

**BILL TO**

ANALYSIS REQUEST

Company Name: VerTex Resource Group							BILL TO							ANALYSIS REQUEST																				
Project Manager: Chad Hensley							P.O. #:																											
Address: 3101 Boyd dr							Company: Mike Exxon Mobile																											
City: Carsbad NM State: N/M Zip: 88220							Attn: Chad Hensley																											
Phone #: 505-414-XXXX Fax #:							Address: on file																											
Project #: 25A-02616 Project Owner:							City:																											
Project Name: PLU 23 DTG CVR							State:																											
Project Location:							Zip:																											
Sample Name: Kahna Taylor							Phone #:																											
FOR LAB USE ONLY							Fax #:																											
Lab I.D. Sample I.D. HRS3001							(G)RAB OR (C)OMP							MATRIX							PRESERV							SAMPLING						
							# CONTAINERS																											
7 BH25-04 0' 6.1 8 BH25-04 2' 1 9 BH25-05 0' 1 10 BH25-05 1' 11 SS25-01 12 SS25-02 13 SS25-03 14 SS25-04 15 SS25-05							GROUNDWATER																											
							WASTEWATER																											
							SOIL																											
							OIL																											
							SLUDGE																											
							OTHER :																											
							ACID/BASE:																											
							ICE / COOL																											
							OTHER :																											
														DATE							TIME													
							5/20							10:00							X X X													
														10:10																				
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														10:40																				
														10:50																				
														11:00																				
														11:10																				
														11:20																				

GRO, PRO, MEO
Chlorides
BTEX

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Relinquished By: [Signature]		Date: 5/22		Received By: [Signature]		Date: 5/22	
Relinquished By: [Signature]		Date: 5/22		Received By: [Signature]		Date: 5/22	
Delivered By: (Circle One)		Observed Temp. °C		Sample Condition		CHECKED BY:	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Cool Intact Yes ☒ No ☐		(Initials) [Signature]	
				Thermometer ID		Turnaround Time:	
				Correction Factor		Standard ☒ Rush ☐	
				Bacteria (only) Sample Condition		ATTN: Colton S. Brown @ Exxonmobil.com	
				Cool Intact Yes ☐ No ☐			
				Observed Temp. °C			
				Corrected Temp. °C			

Remarks: Cost Code: 2210251001

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

All Results are emailed. Please provide Email address:

CHensley@vertex.ca, Kahna.Taylor@vertex.ca

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

ANALYSIS REQUEST

Company Name: Vertex resource Group (bill to Green) Project Manager: Chad Hensley Address: 3101 boyd dr City: Carsbad State: NM zip: 88220 Phone #: on file Fax #: Project #: 25A-02616 Project Owner: Project Name: PLU 23 OTP CVB Project Location: Sampler Name: Katrina Taylor FOR LAB USE ONLY				BILL TO P.O. #: Company: Exxon Mobil Attn: Colton Brown Address: City: on file State: Zip: Phone #: Fax #:				ANALYSIS REQUEST			
Lab I.D. Sample I.D.		(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :		MATRIX PRESERV SAMPLING		DATE TIME		Gro, Dro, MRO (TPH) Chlorides BTEX			
14 BH25-06 0 17 BH25-06 1 18 BH25-07 0.25 19 BH25-08 0.25 20 SS25-06 0		6 1 1 1 1 1 1 1 1 1		5/21 10:30 11:00 11:30 12:00		x x x x x					
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Relinquished By: Katrina Taylor Date: 5/12 Received By: Skeckiguer Date: 8:00 Time: 1:00 Received By:				Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: REMARKS: Cost Code: 2210251001 ATTN: Colton S. Brown @ Exxon Mobil Com				Turnaround Time: Standard ☒ Rush ☐ Thermometer ID #: #140 Correction Factor: -0.3 Corrected Temp. °C:			
Delivered By: (Circle One) Sampler - UPS - Bus - Other:				Observed Temp. °C: 14.4 Corrected Temp. °C: 14.1 Sample Condition: Cool ☒ Intact ☒ Checked By: (initials) SK				Corrected Temp. °C:			



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

June 19, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: PLU 23 DTD CVB

Enclosed are the results of analyses for samples received by the laboratory on 06/13/25 15:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 06/13/2025
Reported: 06/19/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Alyssa Parras

Sample ID: BS25 - 01 0.25' (H253545-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2025	ND	2.10	105	2.00	3.83	
Toluene*	<0.050	0.050	06/16/2025	ND	2.10	105	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	2.08	104	2.00	3.41	
Total Xylenes*	<0.150	0.150	06/16/2025	ND	6.40	107	6.00	3.54	
Total BTEX	<0.300	0.300	06/16/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	1550	16.0	06/16/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	35.2	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 102 % 44.4-145

Surrogate: 1-Chlorooctadecane 102 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 06/13/2025
Reported: 06/19/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Alyssa Parras

Sample ID: BS25 - 02 0.25' (H253545-02)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/16/2025	ND	2.10	105	2.00	3.83		
Toluene*	<0.050	0.050	06/16/2025	ND	2.10	105	2.00	3.61		
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	2.08	104	2.00	3.41		
Total Xylenes*	<0.150	0.150	06/16/2025	ND	6.40	107	6.00	3.54		
Total BTX	<0.300	0.300	06/16/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	384	16.0	06/16/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	281	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	60.4	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 96.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 103 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 06/13/2025
 Reported: 06/19/2025
 Project Name: PLU 23 DTD CVB
 Project Number: 25A - 02616
 Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Alyssa Parras

Sample ID: BS25 - 03 0.25' (H253545-03)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2025	ND	2.10	105	2.00	3.83	
Toluene*	<0.050	0.050	06/16/2025	ND	2.10	105	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	2.08	104	2.00	3.41	
Total Xylenes*	<0.150	0.150	06/16/2025	ND	6.40	107	6.00	3.54	
Total BTX	<0.300	0.300	06/16/2025	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	1920	16.0	06/16/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	72.6	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	16.3	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 92.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 06/13/2025
Reported: 06/19/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Alyssa Parras

Sample ID: BS25 - 04 0.25' (H253545-04)

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	06/16/2025	ND	1.88	94.1	2.00	1.14		
Toluene*	<0.050	0.050	06/16/2025	ND	1.91	95.3	2.00	0.999		
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	1.85	92.5	2.00	0.923		
Total Xylenes*	<0.150	0.150	06/16/2025	ND	5.76	96.0	6.00	0.221		
Total BTEX	<0.300	0.300	06/16/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	06/16/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	20.4	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 92.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 06/13/2025
 Reported: 06/19/2025
 Project Name: PLU 23 DTD CVB
 Project Number: 25A - 02616
 Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Alyssa Parras

Sample ID: BS25 - 05 0.25' (H253545-05)

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	06/16/2025	ND	1.88	94.1	2.00	1.14		
Toluene*	<0.050	0.050	06/16/2025	ND	1.91	95.3	2.00	0.999		
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	1.85	92.5	2.00	0.923		
Total Xylenes*	<0.150	0.150	06/16/2025	ND	5.76	96.0	6.00	0.221		
Total BTEX	<0.300	0.300	06/16/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5040	16.0	06/16/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	<10.0	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 99.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 99.2 % 40.6-153

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

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 06/13/2025
Reported: 06/19/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Alyssa Parras

Sample ID: BS25 - 06 0.25' (H253545-06)

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	06/16/2025	ND	1.88	94.1	2.00	1.14		
Toluene*	<0.050	0.050	06/16/2025	ND	1.91	95.3	2.00	0.999		
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	1.85	92.5	2.00	0.923		
Total Xylenes*	<0.150	0.150	06/16/2025	ND	5.76	96.0	6.00	0.221		
Total BTEx	<0.300	0.300	06/16/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	1790	16.0	06/16/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	15.9	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 90.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.2 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 06/13/2025
Reported: 06/19/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Alyssa Parras

Sample ID: BS25 - 07 0.25' (H253545-07)

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	06/16/2025	ND	1.88	94.1	2.00	1.14		
Toluene*	<0.050	0.050	06/16/2025	ND	1.91	95.3	2.00	0.999		
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	1.85	92.5	2.00	0.923		
Total Xylenes*	<0.150	0.150	06/16/2025	ND	5.76	96.0	6.00	0.221		
Total BTEX	<0.300	0.300	06/16/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10700	16.0	06/16/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	<10.0	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 85.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 85.4 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 06/13/2025
Reported: 06/19/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Alyssa Parras

Sample ID: BS25 - 08 0.25' (H253545-08)

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	06/16/2025	ND	1.88	94.1	2.00	1.14		
Toluene*	<0.050	0.050	06/16/2025	ND	1.91	95.3	2.00	0.999		
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	1.85	92.5	2.00	0.923		
Total Xylenes*	<0.150	0.150	06/16/2025	ND	5.76	96.0	6.00	0.221		
Total BTEx	<0.300	0.300	06/16/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 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	8640	16.0	06/16/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	<10.0	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 90.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 94.5 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 06/13/2025
Reported: 06/19/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Alyssa Parras

Sample ID: BS25 - 09 0.25' (H253545-09)

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	06/16/2025	ND	1.88	94.1	2.00	1.14		
Toluene*	<0.050	0.050	06/16/2025	ND	1.91	95.3	2.00	0.999		
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	1.85	92.5	2.00	0.923		
Total Xylenes*	<0.150	0.150	06/16/2025	ND	5.76	96.0	6.00	0.221		
Total BTEx	<0.300	0.300	06/16/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	11200	16.0	06/16/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	<10.0	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 95.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 98.6 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 06/13/2025
Reported: 06/19/2025
Project Name: PLU 23 DTD CVB
Project Number: 25A - 02616
Project Location: EXXON MOBIL - EDDY CO.

Sampling Date: 06/13/2025
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Alyssa Parras

Sample ID: WS25 - 01 0-0.25' (H253545-10)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/16/2025	ND	1.88	94.1	2.00	1.14		
Toluene*	<0.050	0.050	06/16/2025	ND	1.91	95.3	2.00	0.999		
Ethylbenzene*	<0.050	0.050	06/16/2025	ND	1.85	92.5	2.00	0.923		
Total Xylenes*	<0.150	0.150	06/16/2025	ND	5.76	96.0	6.00	0.221		
Total BTX	<0.300	0.300	06/16/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	06/16/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2025	ND	187	93.7	200	3.61	
DRO >C10-C28*	<10.0	10.0	06/16/2025	ND	185	92.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	06/16/2025	ND					

Surrogate: 1-Chlorooctane 92.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 92.6 % 40.6-153

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Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

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

Company Name: Vortex Resource Group		BILL TO					
Project Manager: Chad Hensley		P.O. #:					
Address: 3101 Boyd dr		Company: Exxon Mobil					
City: Alamogordo		Attn: Colton Brown					
Phone #: 575-255-5001		Address: on file					
Project #: 25A-02616		City:					
Project Owner:		State:					
Project Name: PLU 23 DTD CVR		Zip:					
Project Location: PLU 23 DTD CVR		Phone #:					
Sample Name: Katrina Taylor		Fax #:					
FOR LAB USE ONLY		SAMPLING					
Lab I.D.	Sample I.D.	MATRIX		PRESERV	DATE	TIME	ANALYSIS REQUEST
		(G)RAB OR (C)OMP	# CONTAINERS				
H253545	BS25-01	0.25					TPH (DRO, GRO, MRO)
	BS25-02	0.25					Chlorides
	BS25-03	0.25					BTEX
	BS25-04	0.25					
	BS25-05	0.25					
	BS25-06	0.25					
	BS25-07	0.25					
	BS25-08	0.25					
	BS25-09	0.25					
	BS25-01	0-0.25					
RELEASE NOTE: Liability and Damages: Cardholder's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.		Verbal Result: ☐ Yes ☐ No		Add'l Phone #:			
Relinquished By: Katrina Taylor		Received By: Colton Brown		All Results are emailed. Please provide Email address:			
Date: 6/13/25		Time: 15:07		REMARKS: Colton Brown @ ExxonMobil, Com, Chensley@vortex.ca			
Delivered By: (Circle One)		Observed Temp: 30.9C		Turnaround Time: Standard			
Sampler - UPS - Bus - Other:		Corrected Temp: 33.8C		Thermometer ID: 1113 + 140			
		Sample Condition		Bacteria (only)			
		Cool Intact ☐ Yes ☒ No		Cool Intact ☐ Yes ☒ No			
		CHECKED BY: AB		Corrected Temp: 3C			

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

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 479806

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 479806
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2513334879
Incident Name	NAPP2513334879 PLU 23 DTD CVB @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received

Location of Release Source

Please answer all the questions in this group.

Site Name	PLU 23 DTD CVB
Date Release Discovered	05/12/2025
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.

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

Nature and Volume of Release

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

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Other (Specify) Produced Water Released: 9 BBL Recovered: 0 BBL Lost: 9 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)	Leak on a waterline of the test separator

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Phone: (505) 476-3441

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Phone: (505) 629-6116

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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, Page 2

Action 479806

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 479806
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<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: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 06/27/2025
--	--

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 3

Action 479806

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 479806
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	56800
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	74
GRO+DRO (EPA SW-846 Method 8015M)	74
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	06/11/2025
On what date will (or did) the final sampling or liner inspection occur	06/13/2025
On what date will (or was) the remediation complete(d)	06/13/2025
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	1740
What is the estimated volume (in cubic yards) that will be remediated	16.1
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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General Information
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Oil Conservation Division
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QUESTIONS, Page 4

Action 479806

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 479806
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 06/27/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 479806

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 479806
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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QUESTIONS, Page 6

Action 479806

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 479806
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	473128
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/16/2025
What was the (estimated) number of samples that were to be gathered	13
What was the sampling surface area in square feet	1750

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
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	1740
What was the total volume (cubic yards) remediated	16.1
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	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	n/a
<i>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>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 06/27/2025

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Action 479806

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 479806
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 479806

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 479806
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	The remediation closure report is approved.	7/8/2025
michael.buchanan	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. The OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	7/8/2025
michael.buchanan	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	7/8/2025
michael.buchanan	A revegetation report will not be accepted until revegetation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	7/8/2025
michael.buchanan	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	7/8/2025
michael.buchanan	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	7/8/2025