Incident Number: nAPP2517135924

Release Assessment and Deferral

PLU Big Sinks 25 Federal Battery

Unit B, Section 36, Township 24 South, Range 30 East

Facility ID: fAPP2123047138

County: Eddy

Vertex File Number: 25A-03510

Prepared for:

ExxonMobil Upstream Company

Prepared by:

Vertex Resource Services Inc.

Date:

December 2025

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Release Assessment and Deferral
PLU Big Sinks 25 Federal Battery
Unit B, Section 36, Township 24 South, Range 30 East
Facility: fAPP2123047138
County: Eddy

Prepared for:
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12/10/2025
Date

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SENIOR PROJECT MANAGER, REPORT REVIEW

12/16/2025
Date

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0.0 Amendment to Closure Report

The following report has been updated and includes a summary of efforts and justifications to amend deferral denial concerns notated by New Mexico Oil Conservation Division on October 9, 2025.

1.0 Introduction

ExxonMobil Upstream Company (ExxonMobil) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Deferral for a produced water release that occurred on June 15, 2025, at PLU Big Sinks 25 Federal Battery API 30-015-41091 (hereafter referred to as the "site"). ExxonMobil submitted an initial C-141 New Mexico Oil Conservation Division (NMOCD) on June 24, 2025. Incident ID number nAPP2517135924 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 deferred until such time as all oil and gas activities are terminated and the site is reclaimed as per NMAC 19.15.29.13.

2.0 Incident Description

The release was discovered on June 15, 2025, after a hole developed in a BV valve releasing fluid from the discharge side of the associated transfer pump. The incident was reported on June 15, 2025, and involved the release of approximately thirty-three (33) barrels (bbl.) of produced water released. With thirty (30) bbl. of produced water released into lined containment and 3 bbl. of produced water on a permeable surface. Approximately (30) thirty bbl. of free fluid was removed during initial clean-up. Additional details relevant to the release are presented in the C-141 Report.

3.0 Site Characteristics

The site is located approximately 14.34 miles southeast of Malaga, New Mexico (Google Inc., 2025). The legal location for the site is Unit B, Section 36, Township 24 South, Range 30 East in Eddy County, New Mexico. The spill area is located on State Land property. An aerial photograph and site schematic are presented on Figure 1.

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2025) indicates the site's surface geology primarily comprised Qoa - older alluvial deposits of upland plains and piedmont areas. Predominant soil textures on the site are gravelly fine sandy loam, silty clay loam, and clay loam. The Natural Resources Conservation Service *Web Soil Survey* characterizes the predominant soil texture at the site as Simona-Bippus complex. It tends to be well drained with very high runoff and very low available moisture levels in the soil profile (United States Department of Agriculture, Natural Resources Conservation Service, 2025). The site is in an area of low karst potential (United States Department of the Interior, Bureau of Land Management, 2018).

The surrounding landscape is associated with plains, alluvial fans, and flood plains at elevations of 1,800 to 5,000 feet

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above sea level. The climate is semi-arid, with annual precipitation ranging between 8 to 24 inches. Historically, the plant community had a grassland aspect, dominated by grasses with shrubs. Black grama and sacaton are dominant with a mixture of creosotebush and mesquite shrubs. Overgrazing and extended drought can reduce grass cover (United States Department of Agriculture, Natural Resources Conservation Service, 2025).

There is no surface water located at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC (New Mexico Oil Conservation Division, 2018), is the Pecos River located approximately 41,433 feet west of the site. There is an emergent wetland located approximately 6,399 feet northwest of the release, which is inside the threshold outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC (United States Fish and Wildlife Service, 2025).

4.0 Closure Criteria Determination

The depth to groundwater was determined using the New Mexico Office of the State Engineer Water Column/Average Depth to Water reports. A 0.55-mile search radius was used to determine groundwater depth. The closest recorded depth to groundwater was determined to be greater than 110 feet below ground surface (bgs) and 2,925 feet from the site (New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System, 2025). On July 3, 2025, NMOCD approved a variance request allowing for OSE POD C-04478 to be referenced as the depth to groundwater (DTGW) well (see Appendix C). Documentation used in Closure Criteria Determination research is included in Appendix A.

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Table 1. Closure Criteria Determination				
Site Name: PLU Big Sinks 25 Federal Battery				
Spill Coordinates: 32.18147, -103.83312		X: UTM easting	Y: UTM northing	
Site Specific Conditions		Value	Unit	Reference
1	Depth to Groundwater (nearest reference)	>110	feet	1
	Distance between release and nearest DTGW reference	2,925	feet	
		0.55	miles	
	Date of nearest DTGW reference measurement	October 7, 2020		
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	41,433	feet	2
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	6,622	feet	3
4	Within 300 feet from an occupied residence, school, hospital, institution or church	53,714	feet	4
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**	70,168	feet	5
	ii) Within 1000 feet of any fresh water well or spring	70,168	feet	5
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	6
7	Within 300 feet of a wetland	6,399	feet	7
8	Within the area overlying a subsurface mine	No	feet	8
	Distance between release and nearest registered mine	9,778	feet	
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low	9
	Distance between release and nearest unstable area	27,716	feet	
10	Within a 100-year Floodplain	500	year	10
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	7,455	feet	
11	Soil Type	BB, Berino Complex		11
12	Ecological Classification	R070BD003NM — Loamy Sand		12
13	Geology	older alluvial deposits of upland plains and piedmont areas		13
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	>100'	<50' 51-100' >100'	

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 = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO)

BTEX - Benzene, toluene, ethylbenzene, and xylenes

5.0 Remedial Actions Taken

5.1 Initial Characterization

Initial examination on June 26, 2025, ExxonMobil was informed that liner integrity was noted as compromised near the point of release. Multiple tears and puncture holes were seen in the initial inspection and are noted in picture by sample BH25-03 on June 26, 2025. The Daily Field Report and associated photographs of the initial inspection are included in Appendix B.

Vertex requested permission to cut into the liner to collect samples BH25-01 and BH25-02 for horizontal delineation and a sample at BH25-03 for vertical delineation near the compromised area. A *request* was made to ExxonMobil to replace the liner and was approved. Initial characterization soil sampling was completed, with boreholes advanced via hand auger to investigate the impact of the liner perforations. Four boreholes were established outside of containment for horizontal and vertical delineation to cover the three-bbl. overspray, and three more points were established inside the containment beneath the liner for vertical delineation. The borehole BH25-03 inside the tank battery was advanced to refusal at a depth of 2 feet bgs. Vertical delineation was not achievable inside the tank battery. A bore hole outside of the tank battery at BH25-07 was attempted, but refusal was reached again at 2 feet bgs and the borehole was abandoned. On August 8, 2025, a second attempt was conducted with test pit (TP25-01) via backhoe positioned just outside of tank battery to achieve vertical delineation. Vertical delineation was achieved at 6 feet bgs. Impacted soils were field screened and collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Cardinal Laboratory Analysis under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chloride (EPA Method 300.0). Laboratory results are presented in Table 3, and the laboratory data report is included in Appendix D.

Sample BH25-03 boreholes inside the containment yielded results that exceeded NMOCD strictest criteria for TPH and/or chloride, while TP25-01 achieved vertical delineation. Deferral was requested for the portion of contaminated soil directly under the tank battery and containment as it would require extensive disassembly and movement of the infrastructure in addition to shut-in of the wells to complete remedial activities.

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5.2 Liner Inspection

On August 5, 2025, Vertex provided 48-hour notification of the liner inspection to NMOCD, as required by Subparagraph (a) of Paragraph (5) of Subsection A 19.15.29.11 NMAC. On August 8, 2025, Vertex was on-site to conduct an inspection of the lined containment and verify that the liner was intact and had the ability to contain the release. Replacement of the liner had not been completed. A liner inspection was rescheduled for August 18, 2025, to capture the new liner installed. The Daily Field Report and associated photographs of the liner inspection are included in Appendix E.

6.0 Deferral Request

6.1 Closure Denial

Exxon submitted the initial closure report to the NMOCD on October 09, 2025. The initial request was denied on October 09, 2025, with the following notations:

> *1) Vertical delineation is required to be completed. TP25-01 does not show vertical delineation as there are no impacts above Closure Criteria found there. BH 25-03 has GRO +DRO=1,333 mg/kg at 2' depth and delineation was stopped there. These impacts are required to be vertically delineated to confirm that the contamination does not cause an imminent risk to fresh water, public health and the environment.*
> *2) Referring to the attached photos, it appears the liner's perforations were patched with duct tape. Is it still patched with duct tape? Explain.*
> *3) The laboratory reports for samples collected at TP25-01 are not attached and are required per 19.15.29.12.E.(c).*

On November 13, 2025, Vertex personnel guided a skid steer operator utilizing a mechanical auger to bore a hole on the outside of the berm at the closest possible point from to BH25-03. A hole was cut on the outside portion of the berm, into the liner, and the auger was placed at a 195-degree angle in respect to the skid steer, and excavated toward the spill to a depth of 4 feet bgs. This position was chosen due to its avoidance of electrical lines running throughout the area. Sample TP25-02 was collected at 4 feet bgs for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Cardinal Laboratories 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 3, and the laboratory data reports are included in Appendix D. The liner was patched with appropriate materials after TP25-02 was collected.

Vertex recommends no additional remedial action to address the release at PLU Big Sinks 25 Federal Battery at this time. The secondary containment liner was mostly intact and contained the majority of the release. The liner has since been replaced and confirmed to be intact and capable of containing a release. There are no anticipated risks to human, ecological or hydrological receptors associated with the release site.

As the release occurred under an active tank battery, Vertex requests that restoration and reclamation of the spill area be deferred until such time as the equipment is removed and the facility pad reclaimed per 19.15.29.13 NMAC.

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Vertex requests that this incident (nAPP2517135924) be deferred for the area under the tank battery and containment, as the areas outside the containment have met closure requirements set forth in Subsection E of 19.15.29.12 NMAC. ExxonMobil certifies that all information in this report and the attachments is correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on June 15, 2025, release at PLU Big Sinks 25 Federal Battery.

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

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7.0 References

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

New Mexico Bureau of Geology and Mineral Resources. (2025). *Interactive Geologic Map*. Retrieved from https://maps.nmt.edu/

New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2025). *Water Column/Average Depth to Water Report.* Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html.

New Mexico Oil Conservation Division. (2018). N*ew Mexico Administrative Code – Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.

United States Department of Agriculture, Natural Resources Conservation Service. (2025). *Web Soil Survey.* Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

United States Department of the Interior, Bureau of Land Management. (2018). *New Mexico Cave/Karsts.* Retrieved from https://www.blm.gov/programs/recreation/recreation-programs/caves/new-mexico.

United States Fish and Wildlife Service. (2025). *National Wetlands Inventory Surface Waters and Wetland*. Retrieved from https://www.fws.gov/ wetlands/data/Mapper.html.

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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.

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FIGURES

Borehole
Trench Sample
Approximate Lease Boundary
Approximate Release Extent (~212 sq.ft.)
Production Equipment

VERTEX

0 20 40 ft.

NAD 1983 UTM Zone 13N
Date: Dec 16/25

Map Center:
Lat: 32.181563°N,
Long:103.832978°W

N

Characterization Schematic
PLU Big Sinks 25 Fed Battery

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 Google Earth, 2024. Approximate lease boundary from imagery by Vertex Professional Services Ltd. (VPS), 2025.
Site features from GPS by VPS, 2025.

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Document Path: S:\04 - Geomatics\1-Projects_US PROJECTS\ExxonMobil Upstream Comp (Former XTO)\XTO Energy\2025\25A-03510 - PLU Big Sinks 25 Fed Battery\00 - ArcPro\PLU Big Sinks 25 Fed Battery.aprx

TABLES

Client Name: ExxonMobil Upstream Company
Site Name: PLU Big Sinks 25 Fed Battery
NMOCD Tracking #: nAPP2517135924
Project #: 25A-03510
Lab Report(sX): H253918, H254959, H255842, & H257600

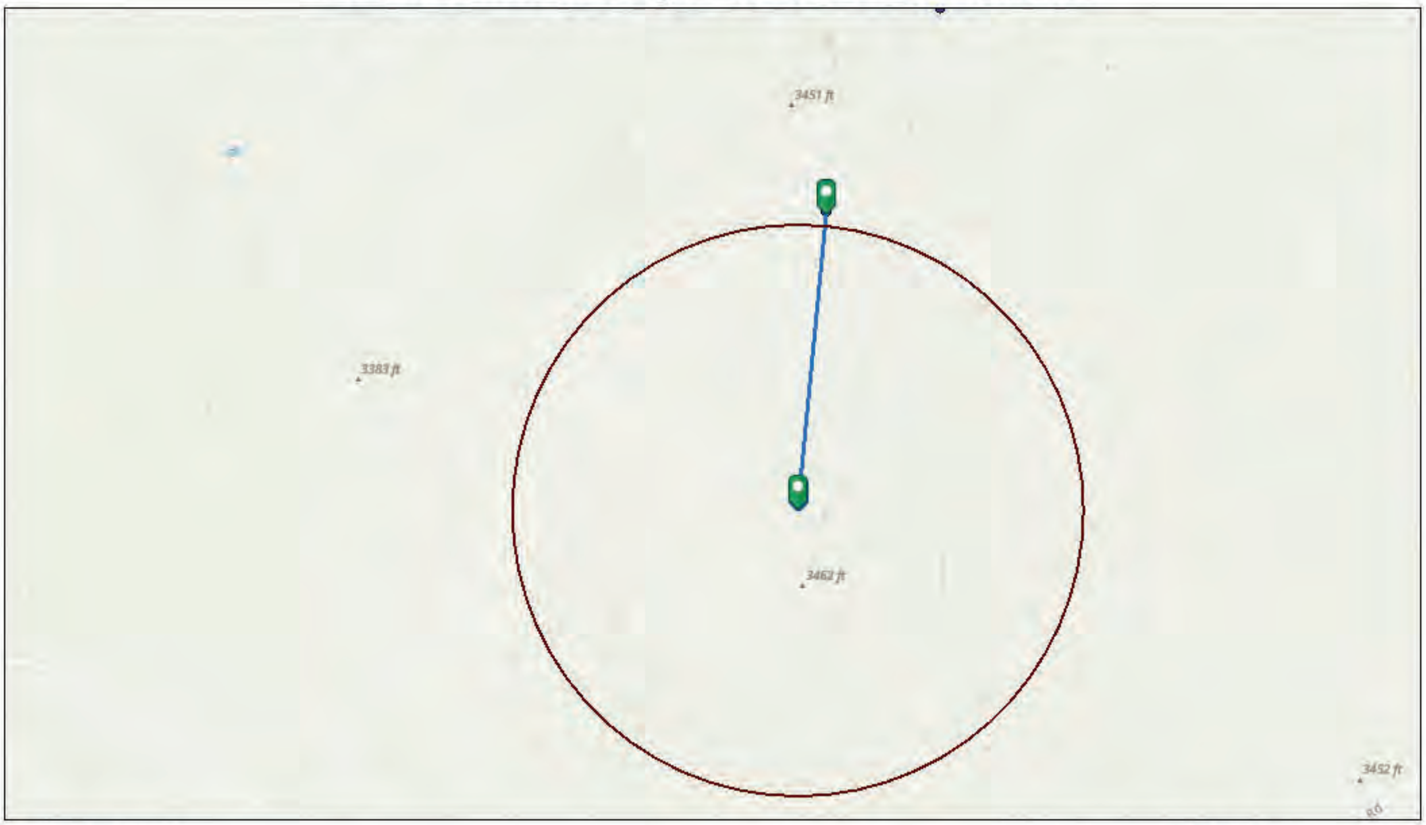
Table 3. Initial Characterization/Confirmatory Sample Field Screen and Laboratory Results

Sample Description			Petroleum Hydrocarbons							Inorganic
			Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			Depth to Groundwater > 100 feet bgs							
BH25-01	0	June 26, 2025	ND	ND	ND	ND	ND	ND	ND	128
	1	June 26, 2025	ND	ND	ND	ND	ND	ND	ND	112
BH25-02	0	June 26, 2025	ND	ND	ND	ND	ND	ND	ND	240
	1	June 26, 2025	ND	ND	ND	ND	ND	ND	ND	304
BH25-03	0	June 26, 2025	ND	ND	117	**9660**	**1200**	**9777**	**10977**	960
	1	June 26, 2025	ND	ND	ND	428	84	428	512	768
	2R	June 26, 2025	ND	ND	13	**1320**	233	**1333**	1566	1020
BH25-04	0	June 26, 2025	ND	ND	ND	11	ND	11	11	64
BH25-05	0	June 26, 2025	ND	ND	ND	ND	ND	ND	ND	224
BH25-06	0	June 26, 2025	ND	ND	ND	ND	ND	ND	ND	176
BH25-07	-		-	-	-	-	-	-	-	-
BH25-08	0.5'	September 16, 2025	ND	ND	ND	ND	ND	ND	ND	ND
BH25-09	0.5'	September 16, 2025	ND	ND	ND	ND	ND	ND	ND	ND
BH25-10	0-0.5'	December 5, 2025	ND	ND	ND	ND	ND	ND	ND	192
BH25-11	0-0.5'	December 5, 2025	ND	ND	ND	ND	ND	ND	ND	176
TP25-01	0	August 8, 2025	ND	ND	ND	48	24	48	72	14800
	1	August 8, 2025	ND	ND	ND	ND	ND	ND	ND	2400
	2	August 8, 2025	ND	ND	ND	ND	ND	0	0	1040
	3	August 8, 2025	ND	ND	ND	10	ND	10	10	1440
	4	August 8, 2025	ND	ND	ND	ND	ND	0	0	1310
	5	August 8, 2025	ND	ND	ND	ND	ND	0	0	960
	6	August 8, 2025	ND	ND	ND	ND	ND	0	0	416
	7	August 8, 2025	ND	ND	ND	ND	ND	0	0	240
	8	August 8, 2025	ND	ND	ND	ND	ND	0	0	256
	9	August 8, 2025	ND	ND	ND	ND	ND	0	0	320
TP25-02	4	November 13, 2025	ND	ND	ND	ND	ND	ND	ND	192

"R" indicates hand auger refusal
"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 A – Closure Criteria Research Documentation

01. 0.55mi from PLU Big Sinks 25 to the Nearest Well



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Override 1

OSE Water PODs

OSW Water Bodys

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

US Census Bureau, NMDOT, Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, NM OSE

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map: New Mexico Oil Conservation Division

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	Tws	Rng	X	Y	Map
NA	C 04478 POD1	SW	SW	NE	25	24S	30E	610077.4	3562041.1	

*** 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:	2020-10-07	**Drill Finish Date:**	2020-10-07	**Plug Date:**	2020-10-15
Log File Date:	2020-10-29	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	0	**Depth Water:**	0

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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Water Right Summary

get image list

WR File Number:	C 04478	**Subbasin:**	CUB	**Cross Reference:**	
Primary Purpose:	MON MONITORING WELL				
Primary Status:	PMT Permit				
Total Acres:		**Subfile:**		**Header:**	
Total Diversion:	0.000	**Cause/Case:**			
Owner:	LT ENVIRONMENTAL INC	**Owner Class:**	Agent		
Contact:	KALEI JENNINGS				
Owner:	XTO ENERGY INC	**Owner Class:**	User		
Contact:	KYLE LITTRELL				

Documents on File

(acre-fee

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion
get images	678382	EXPL	2020-09-09	PMT	LOG	C 04478 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 04478 POD1	NA		SW	SW	NE	25	24S	30E	610077.4	3562041.1		BH-01

*** UTM location was derived from PLSS - see Help**

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WELL RECORD & LOG

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2020 DEC 29 AM 9:30

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (BH-01)	n/a	C-4478

WELL OWNER NAME(S)	PHONE (OPTIONAL)
XTO Energy (Kyle Littrell)	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6401 Holiday Hill Dr.	Midland	TX	79707

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32°	11'	22.57"	N
	LONGITUDE	-103°	49'	56.14"	W

* 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

SW SE NE Sec. 25 T24S R30E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10/07/2020	10/07/2020	temporary well material	110	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) FROM	DEPTH (feet bgl) TO	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)
0	110	±8.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

FOR OSE INTERNAL USE WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. C-4478	POD NO. 1	TRN NO. 678382	
LOCATION 24S-30E-25 2-3-3		WELL TAG ID NO. NA	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	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)
0	3	3	Sand, fine-grained, poorly-graded , Red-Brown	Y ✓ N	
3	5	2	Gravel, 20-30 mil, well graded, little clay	Y ✓ N	
5	13	8	Caliche with some gravel (5-20 mil.) Tan/ Brown	Y ✓ N	
13	24	9	Sand, fine-grained, well-graded some silt, Tan/ Red	Y ✓ N	
24	34	10	Sand, Medium-grained, well-graded some silt, Tan/ Red	Y ✓ N	
34	44	10	Sand, Large-grained, well-graded some silt, Dark Brown	Y ✓ N	
44	110	66	Sand, fine-grained, well-graded, some clay, moist, caliche fragments Red/Brown	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from LTE on-site geologist.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 10/26/2020

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4478	POD NO. 1	TRN NO. 678382	
LOCATION 24S-30E-25 2-3-3		WELL TAG ID NO. NA	PAGE 2 OF 2

2020-10-26_C-4478POD1_OSE_Well Record and Log-89-forsign

Final Audit Report 2020-10-27

Created:	2020-10-27
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAESGKFRG9AU3NcytvOCSRntC1Y-zTs43Y

"2020-10-26_C-4478POD1_OSE_Well Record and Log-89-forsign" History

Document created by Lucas Middleton (lucas@atkinseng.com)
2020-10-27 - 3:14:03 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2020-10-27 - 3:14:17 PM GMT

Email viewed by Jack Atkins (jack@atkinseng.com)
2020-10-27 - 3:21:12 PM GMT- IP address: 74.50.153.115

Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2020-10-27 - 3:22:09 PM GMT - Time Source: server- IP address: 74.50.153.115

Agreement completed.
2020-10-27 - 3:22:09 PM GMT

Adobe Sign

U.S. Fish and Wildlife Service
National Wetlands Inventory

02_PLU Big Sinks 25 Federal Battery_Wat

August 6, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service
National Wetlands Inventory

02. PLU Big Sinks 25 Federal Battery 1.93r

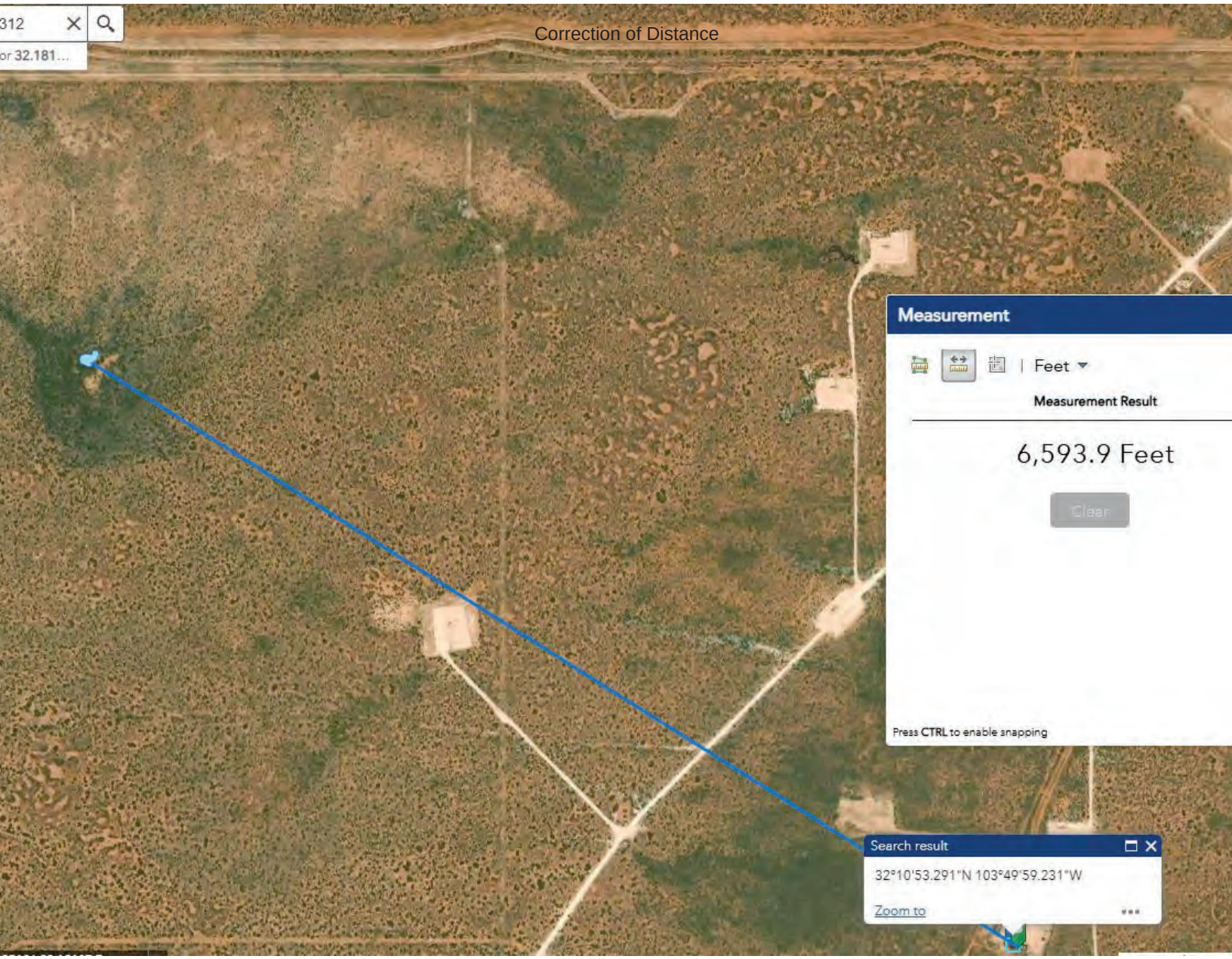
July 1, 2025

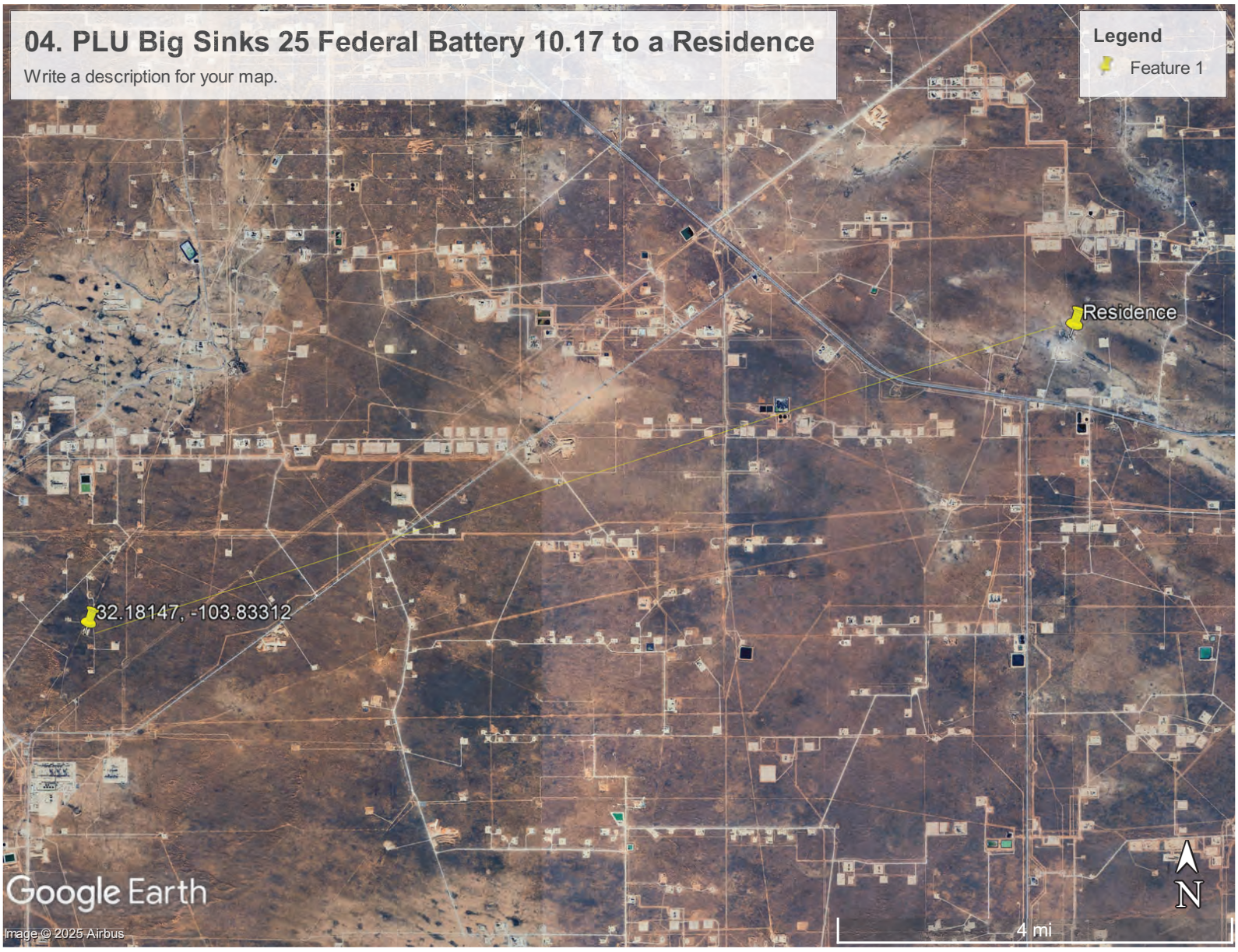
Wetlands

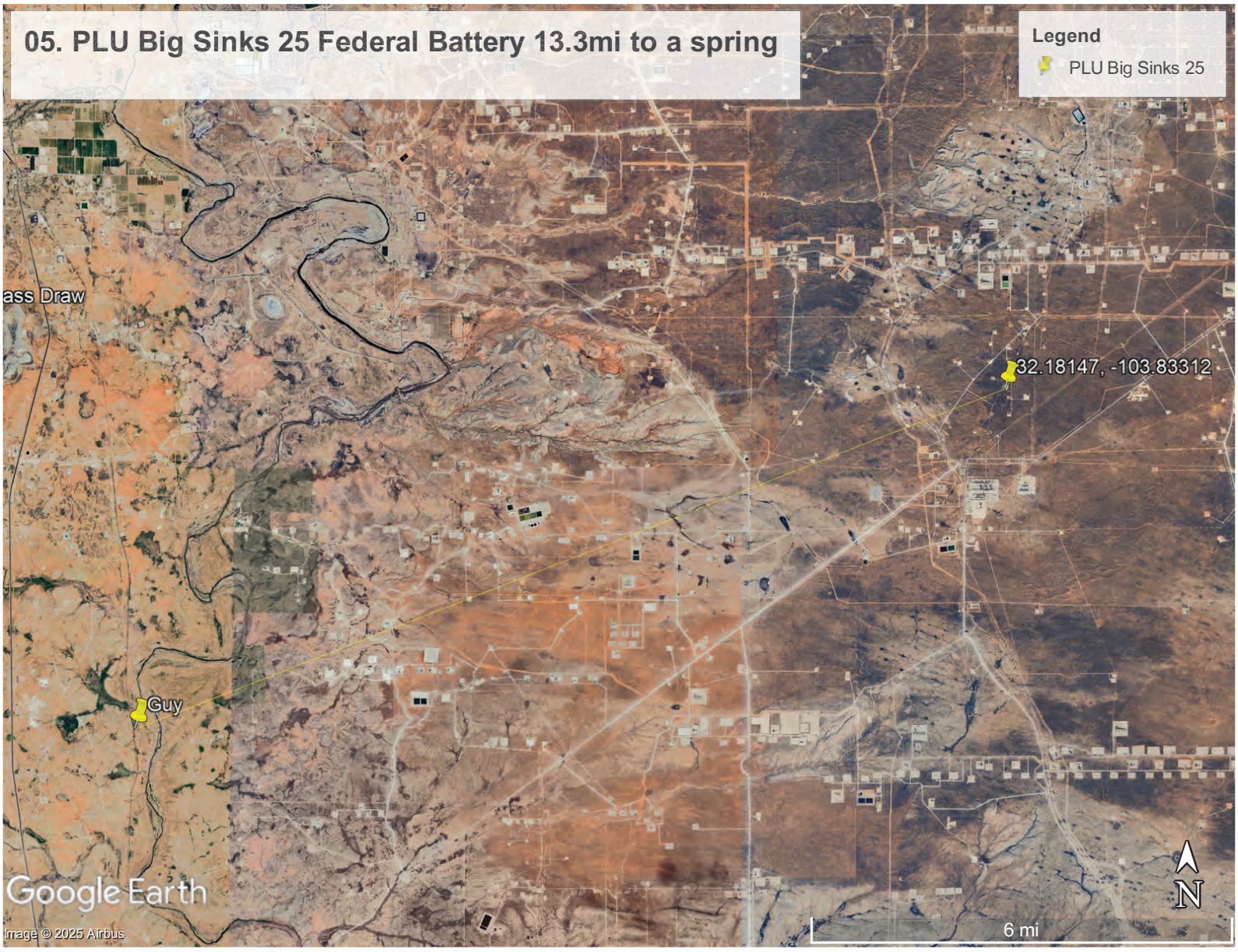
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper


312
or 32.181...
Correction of Distance
Measurement
Feet
Measurement Result
6,593.9 Feet
Clear
Press CTRL to enable snapping
Search result
32°10'53.291"N 103°49'59.231"W
Zoom to


04. PLU Big Sinks 25 Federal Battery 10.17 to a Residence
Write a description for your map.
Legend
Feature 1
Residence
32.18147, -103.83312
Google Earth
Image © 2025 Airbus
4 mi
N


05. PLU Big Sinks 25 Federal Battery 13.3mi to a spring
Legend
PLU Big Sinks 25
ass Draw
32.18147, -103.83312
Guy
Google Earth
Image © 2025 Airbus
6 mi
N

U.S. Fish and Wildlife Service
National Wetlands Inventory

07. PLU Big Sinks 25 1.21 miles from a We

July 1, 2025

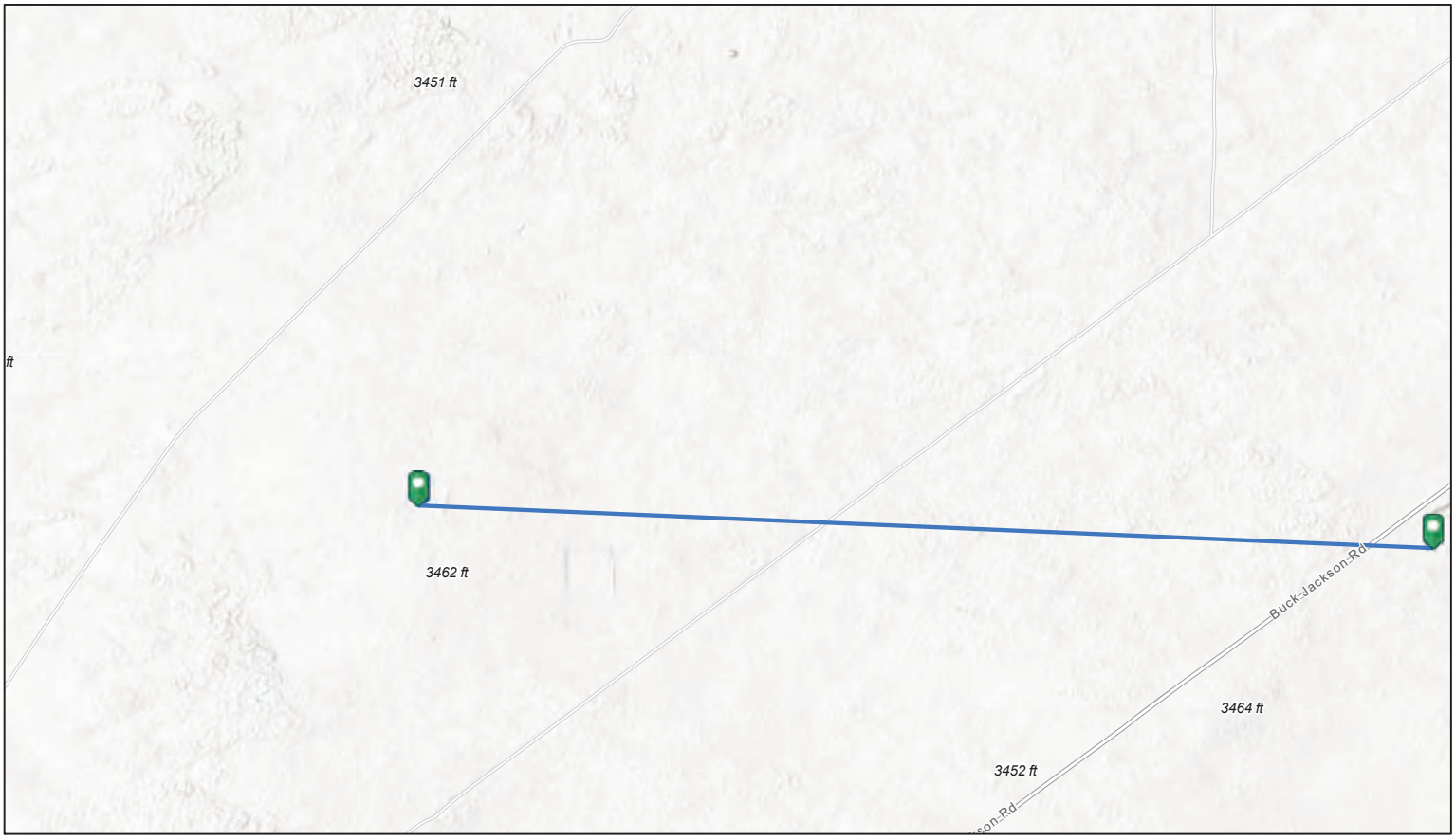
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

08. PLU Big Sinks 25 1.9mi from a Mine



7/1/2025, 2:45:47 PM

Registered Mines

Aggregate, Stone etc.

1:18,056

0 0.13 0.25 0.5 mi

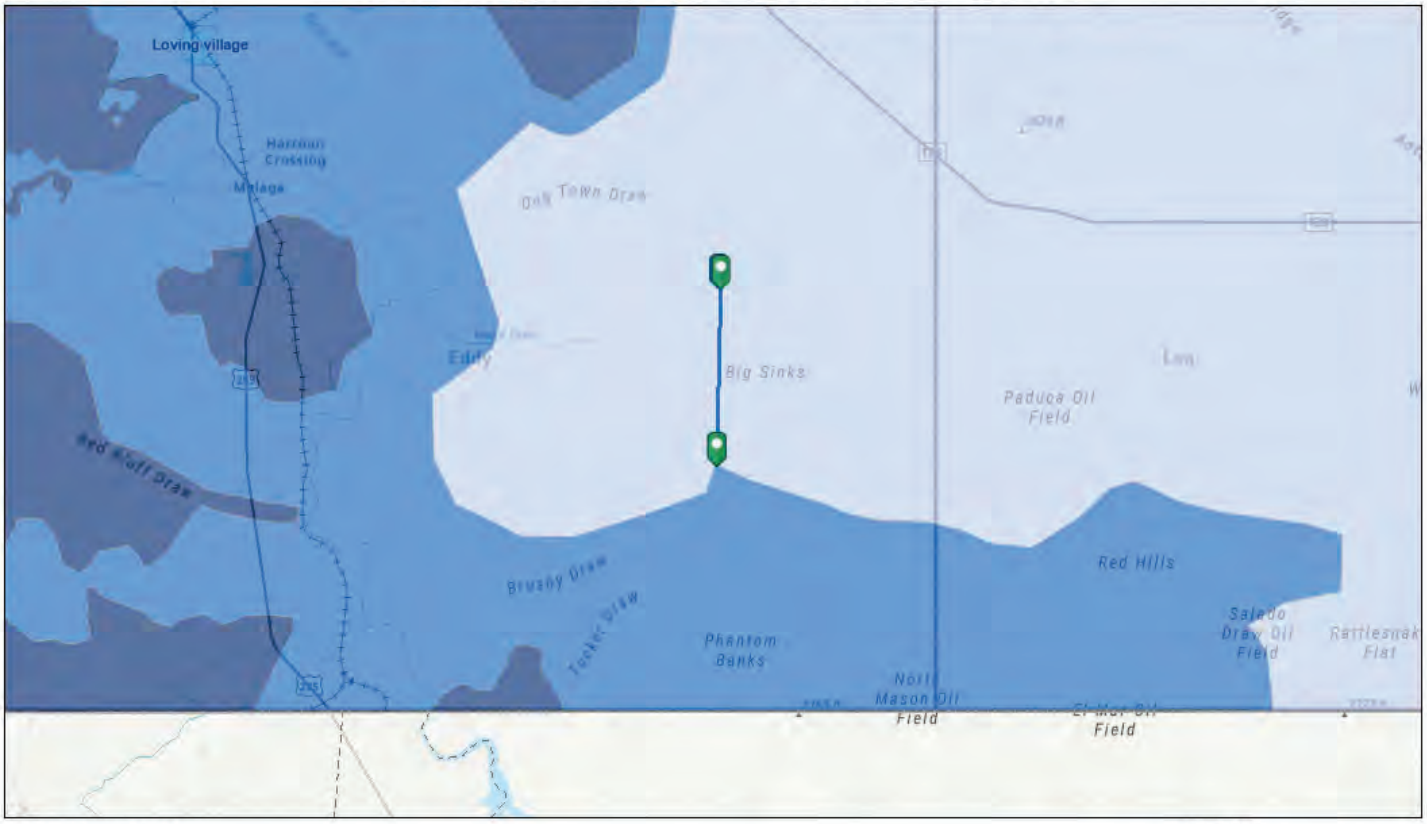
0 0.2 0.4 0.8 km

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

EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

09. PLU Big Sinks 25 is 5.3mi from a Karst area



National Flood Hazard Layer FIRMette

FEMA

103°50'18"W 32°11'9"N

103°49'41"W 32°10'38"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

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
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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 7/1/2025 at 9:22 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.

Custom Soil Resource Report
Soil Map

Custom Soil Resource Report

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BB	Berino complex, 0 to 3 percent slopes, eroded	32.4	100.0%
Totals for Area of Interest		**32.4**	**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.

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.

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

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

Soil Information for All Uses

Ecological Sites

Individual soil map unit components can be correlated to a particular ecological site. The Ecological Site Assessment section includes ecological site descriptions, plant growth curves, state and transition models, and selected National Plants database information.

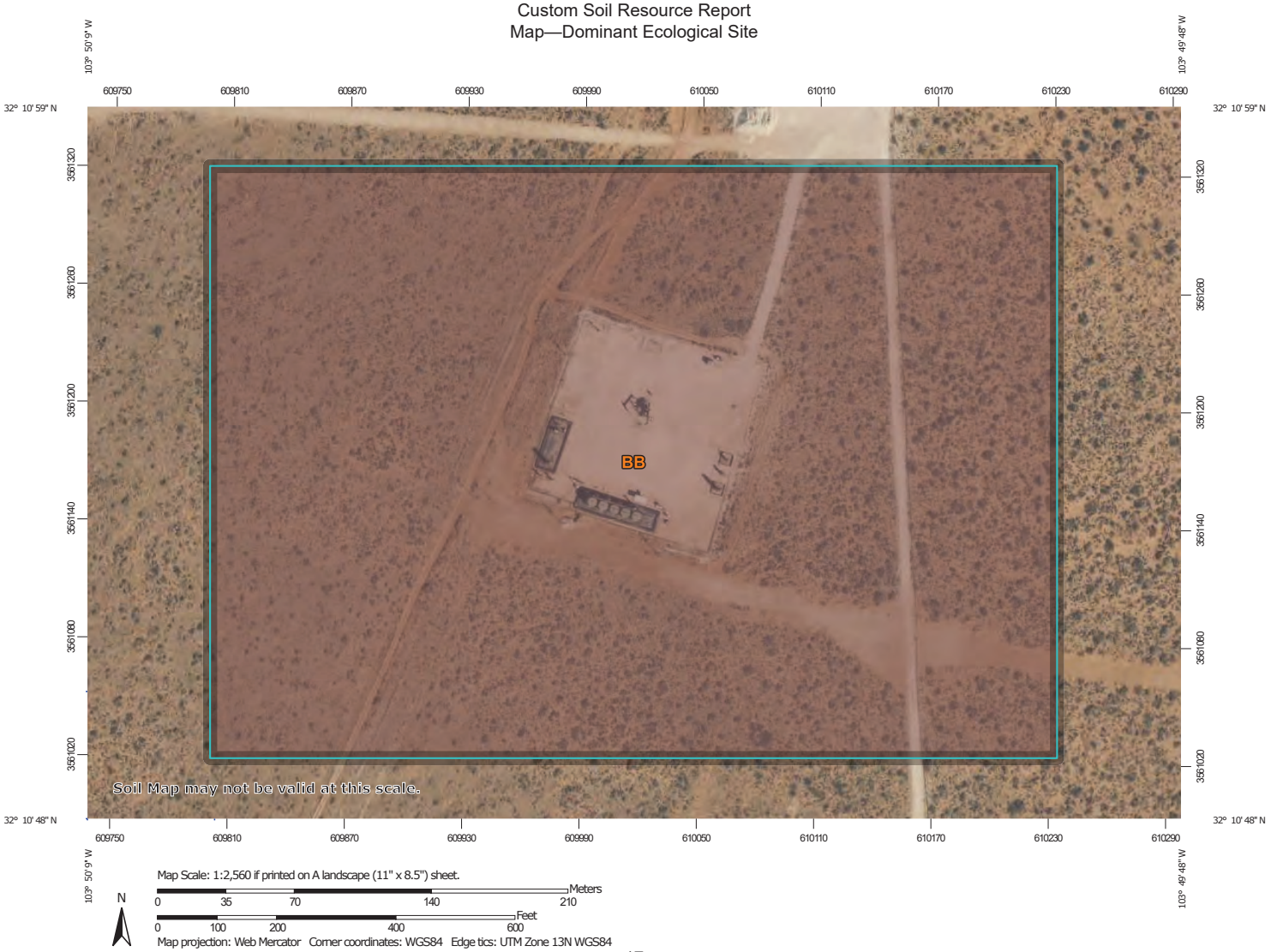
All Ecological Sites —

An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production.

An ecological site name provides a general description of a particular ecological site. For example, "Loamy Upland" is the name of a rangeland ecological site. An "ecological site ID" is the symbol assigned to a particular ecological site.

The map identifies the dominant ecological site for each map unit, aggregated by dominant condition. Other ecological sites may occur within each map unit. Each map unit typically consists of one or more components (soils and/or miscellaneous areas). Each soil component is associated with an ecological site. Miscellaneous areas, such as rock outcrop, sand dunes, and badlands, have little or no soil material and support little or no vegetation and therefore are not linked to an ecological site. The table below the map lists all of the ecological sites for each map unit component in your area of interest.

Custom Soil Resource Report
Map—Dominant Ecological Site



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- R070BD003NM
- Not rated or not available

Soil Rating Lines
- R070BD003NM
- Not rated or not available

Soil Rating Points
- R070BD003NM
- Not rated or not available

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.

Table—Ecological Sites by Map Unit Component

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
BB	Berino complex, 0 to 3 percent slopes, eroded	Berino (60%)	R070BD003NM — Loamy Sand	32.4	100.0%
		Pajarito (25%)	R070BD003NM — Loamy Sand		
		Cacique (4%)	R070BD004NM — Sandy		
		Pajarito (4%)	R070BD003NM — Loamy Sand		
		Wink (4%)	R070BD003NM — Loamy Sand		
		Kermit (3%)	R070BD005NM — Deep Sand		
Totals for Area of Interest				**32.4**	**100.0%**

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

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

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

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

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 B – Daily Field and Sampling Report(s)

Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Incident ID #:	
Site Location Name:		API #:	
Inspection Date:	6/26/2025		

Summary of Times

Arrived at Site	6/26/2025 9:30 AM
Departed Site	6/26/2025 2:30 PM

Field Notes

13:43 BH25-01 through BH25-03 were collected at 0 and 1’

13:43 BH25-03 was collected at 2’ with refusal

13:43 BH25-04 through BH25-06 were collected at 0’

13:44 All samples were field screened

13:44 Map updates were made

Next Steps & Recommendations

1 Create work plan

2 Send samples to lab

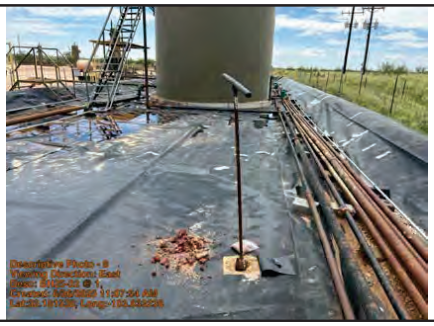
Daily Site Visit Report

Site Photos

Viewing Direction: East	**Viewing Direction**: North
	
BH25-02 @ 0’	BH25-01 @ 0’
Viewing Direction: North	**Viewing Direction**: South
	
BH25-03 @ 0’	BH25-04 @ 0’

Daily Site Visit Report

Viewing Direction: East	**Viewing Direction**: East
	
BH25-05 @ 0’	BH25-05 @ 0’ Stepped out 10’

Viewing Direction: South	**Viewing Direction**: East
	
BH25-04 @ 0’ Stepped out 10’	BH25-02 @ 1’

Daily Site Visit Report

Viewing Direction: West	**Viewing Direction**: North
	
BH25-01 @ 1’	BH25-03 @ 1’
Viewing Direction: South	**Viewing Direction**: East
	
BH25-04 @ 0’ Stepped out another 10’	BH25-05 @ 0’ Stepped out another 10’

Daily Site Visit Report

Viewing Direction: East	**Viewing Direction**: North
	
BH25–02 backfilled	BH25–01 backfilled
Viewing Direction: North	**Viewing Direction**: East
	
BH25–03 backfilled	BH25-05 @ 0’ Stepped out another 15’

Daily Site Visit Report

Viewing Direction: West

BS25-06 @ 0’

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Riley Arnold

Signature: 

Daily Site Visit Report

Client:	ExxonMobil	Incident ID #:	
Site Location Name:	PLU Big Sinks 25 Fed Battery	API #:	
Inspection Date:	7/1/2025		

Summary of Times	
Arrived at Site	7/1/2025 9:10 AM
Departed Site	7/1/2025 10:00 AM

Daily Site Visit Report

Field Notes

16:24 Saftey paperwork was completed upon arrival

16:25 811 stakes were laid out on location

16:26 Photos were added retroactive out of difficulties getting the report to generate

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: Southeast	**Viewing Direction**: Southwest
	
Northwest corner of the 811	Northeast corner of the 811
Viewing Direction: Northeast	**Viewing Direction**: Northwest
	
Southwest corner of the 811	Southeast corner of the 811

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Katrina Taylor

Signature: 

Daily Site Visit Report

Client:	ExxonMobil	Incident ID #:	
Site Location Name:	PLU Big Sinks 25 Fed Battery	API #:	
Inspection Date:	8/8/2025		

Summary of Times	
Arrived at Site	8/8/2025 9:00 AM
Departed Site	8/8/2025 1:00 PM

Daily Site Visit Report

Field Notes

9:12 Travel to site/ safety paperwork

11:51 Test pit was excavated for vertical delineation

11:51 Hard rock slowed progress after 3’

11:52 TP25-01 through TP25-08 were collected and field screened

11:52 Samples were jarred and labeled/ coc’s were created

Next Steps & Recommendations

1 Send samples to lab

2 Reporting

Daily Site Visit Report

Site Photos

Viewing Direction: West	**Viewing Direction**: Southwest
	
TP25-01 @ 0’	TP25-01 @ 1’

Viewing Direction: West

TP25-01 @ 2’

Daily Site Visit Report

Viewing Direction: West	**Viewing Direction**: West
	
TP25-01 @ 4’	TP25-01 @ 5’
Viewing Direction: West	**Viewing Direction**: West
	
TP25-01 @ 6’	TP25-01 @ 7’

Daily Site Visit Report

Viewing Direction: West

TP25-01 @ 8’

Viewing Direction: West

TP25-01 @ 9’

Viewing Direction: South

TP backfilled

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Riley Arnold

Signature: 
Signature

Daily Site Visit Report

Client:	ExxonMobil	Incident ID #:	
Site Location Name:	PLU Big Sinks 25 Fed Battery	API #:	
Inspection Date:	9/16/2025		

Summary of Times	
Arrived at Site	9/16/2025 11:45 AM
Departed Site	9/16/2025 12:30 PM

Daily Site Visit Report

Field Notes

12:15 Travel to site/ safety paperwork

12:15 BH25-08 & BH25-09 were collected at 0.5’

12:16 Samples were field screened

12:16 Samples were jarred and labeled

12:16 Coc were created

12:16 Map was updated

Next Steps & Recommendations

1 Send samples to lab for further analysis

2 Reporting

Daily Site Visit Report

Site Photos

Viewing Direction: North	**Viewing Direction**: Northwest
	
BH25-08 @ 0.5’	BH25-09 @ 0.5’

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Riley Arnold

Signature: 
Signature

Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Incident ID #:	
Site Location Name:	PLU Big Sinks 3-25-31 Battery	API #:	
Inspection Date:	11/13/2025		

Summary of Times	
Arrived at Site	11/13/2025 9:00 AM
Departed Site	11/13/2025 3:00 PM

Daily Site Visit Report

Field Notes

12:24 A hole was cut into liner

12:25 Auger drilled a hole to 4’

12:25 Sample was collected at 4’ and field screened

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: South	**Viewing Direction**: Southeast
	
Liner cut outside of tank battery. 195 degree angle	Drilling in progress

Viewing Direction: Southeast	**Viewing Direction**: Southeast
	
195 degree Hole	130 degree Hole 4 feet bgs.

Daily Site Visit Report

Viewing Direction: South	**Viewing Direction**: South
	
Auger hole backfilled	Liner patched

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Riley Arnold

Signature: 

Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Incident ID #:	
Site Location Name:	PLU Big Sinks 3-25-31 Battery	API #:	
Inspection Date:	12/5/2025		

Summary of Times	
Arrived at Site	12/5/2025 12:45 PM
Departed Site	12/5/2025 1:30 PM

Daily Site Visit Report

Field Notes

12:43 Travel to site/ safety paperwork

12:44 BG25-10 and BG25-11 were collected at 0-6”

13:28 Samples were field screened

13:28 Samples were jarred and labeled

13:28 Coc’s created

13:28 Map updated

Next Steps & Recommendations

1 Send samples to lab for further analysis

2 Report writing

Daily Site Visit Report

Site Photos

Viewing Direction: West	**Viewing Direction**: East
	
BS25-10 @ 0-6”	BS25-11 @ 0-6”

Daily Site Visit Report

VERTEX

Daily Site Visit Signature

Inspector: Riley Arnold

Signature: 

APPENDIX C – Notifications and Variances

From: Wells, Shelly, EMNRD
To: Chad Hensley
Cc: Bratcher, Michael, EMNRD; Riley Arnold; ashley.a.mcafee@exxonmobil.com
Subject: RE: [EXTERNAL] nAPP2517135924 - Variance Request for DTW
Date: Thursday, July 3, 2025 2:43:30 PM

> **Caution:** This email is from an external sender. Please take care when clicking links or opening attachments. When in doubt, contact your IT Department

Good afternoon Chad,

The variance request for NAPP2517135924 PLU BIG SINKS 25 FEDERAL BATTERY is approved to use OSE POD C-04478 which is .55 miles away from release location in order to remediate to Table I > 100 feet to ground water Closure Criteria. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Kind regards,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520 Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Chad Hensley <CHensley@vertexresource.com>
Sent: Thursday, July 3, 2025 9:36 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Riley Arnold <RArnold@vertexresource.com>; Mcafee, Ashley A <ashley.a.mcafee@exxonmobil.com>
Subject: [EXTERNAL] nAPP2517135924 - Variance Request for DTW

> You don't often get email from chensley@vertexresource.com. Learn why this is important
>
> CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To whom it may concern,

Vertex on behalf of ExxonMobil request a variance for DTW distant criteria.

19.15.29.14 VARIANCES:

A. A responsible party may file a written request for a variance from any requirement of 19.15.29 NMAC with the appropriate division district office. The variance request must include:

(1) a detailed statement explaining the need for a variance

Depth to water well is approximately 0.05 miles outside of the limit.

(2) a detailed written demonstration that the variance will provide equal or better protection of fresh water, public health and the environment.

C-4478 well was dry at 100 feet showing ground water exceeds 100 bgs.
Characterization as depicted below shows the site with no sensitive receptors.
Release did not leave location as shown in Site Inspection pdf

Closure Criteria Determination			
Site Name: PLU Big Sinks 25 Federal Battery			
Spill Coordinates: 32.18147, -103.83312	**X: UTM easting**	**Y: UTM northing**	
Site Specific Conditions	**Value**	**Unit**	**Reference**

1	Depth to Groundwater (nearest reference)	2,925	feet	1
	Distance between release and nearest DTGW reference	100	feet	
		0.55	miles	
	Date of nearest DTGW reference measurement	October 7, 2020		
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	10,208	feet	2
3	Within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	54,625	feet	3
4	Within 300 feet from an occupied residence, school, hospital, institution, or church	53,714	feet	4
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**	70,168	feet	5
	ii) Within 1000 feet of any fresh water well or spring		feet	5
6	Within incorporated municipal boundaries or within a defined municipal freshwater field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	feet	6
7	Within 300 feet of a wetland	6,399	feet	7
8	Within the area overlying a subsurface mine	No	feet	8
	Distance between release and nearest registered mine	9,778	feet	
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low	9
	Distance between release and nearest unstable area	27,716	feet	
10	Within a 100-year Floodplain	500	year	10
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	7,455	feet	
11	Soil Type	BB, Berino Complex		11

Chad Hensley
Senior Project Manager

Vertex Resource Services Inc.

Carlsbad, NM 88220

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C 575.200.6167
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www.vertex.ca

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APPENDIX D – Laboratory Data Report and Chain of Custody Form

CARDINAL Laboratories

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

July 07, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: PLU BIG SINKS 25 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/30/25 12:10.

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 accreditated 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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 01 @ 0' (H253918-01)

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	06/30/2025	ND	1.95	97.3	2.00	0.427	
Toluene*	<0.050	0.050	06/30/2025	ND	2.10	105	2.00	0.115	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	1.95	97.5	2.00	0.486	
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.87	97.8	6.00	0.0375	
Total BTEX	<0.300	0.300	06/30/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	192	96.1	200	2.38	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	180	90.2	200	0.859	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane *101 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *106 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 01 @ 1' (H253918-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/30/2025	ND	1.95	97.3	2.00	0.427	
Toluene*	<0.050	0.050	06/30/2025	ND	2.10	105	2.00	0.115	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	1.95	97.5	2.00	0.486	
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.87	97.8	6.00	0.0375	
Total BTEX	<0.300	0.300	06/30/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	192	96.1	200	2.38	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	180	90.2	200	0.859	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane *84.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *103 %* *40.6-153*

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

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 02 @ 0' (H253918-03)

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	06/30/2025	ND	1.95	97.3	2.00	0.427	
Toluene*	<0.050	0.050	06/30/2025	ND	2.10	105	2.00	0.115	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	1.95	97.5	2.00	0.486	
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.87	97.8	6.00	0.0375	
Total BTEX	<0.300	0.300	06/30/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**240**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	192	96.1	200	2.38	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	180	90.2	200	0.859	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane *106 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *112 %* *40.6-153*

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

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 02 @ 1' (H253918-04)

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	06/30/2025	ND	1.95	97.3	2.00	0.427	
Toluene*	<0.050	0.050	06/30/2025	ND	2.10	105	2.00	0.115	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	1.95	97.5	2.00	0.486	
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.87	97.8	6.00	0.0375	
Total BTEX	<0.300	0.300	06/30/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	192	96.1	200	2.38	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	180	90.2	200	0.859	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane *99.8 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *106 %* *40.6-153*

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

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 03 @ 0' (H253918-05)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/30/2025	ND	1.95	97.3	2.00	5.34	
Toluene*	<0.050	0.050	06/30/2025	ND	1.98	98.8	2.00	4.43	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	2.01	101	2.00	4.81	GC-NC
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.97	99.6	6.00	5.07	
Total BTEX	<0.300	0.300	06/30/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *236 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**960**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**117**	10.0	06/30/2025	ND	192	96.2	200	2.35	
DRO >C10-C28*	**9660**	10.0	06/30/2025	ND	189	94.4	200	1.46	QM-07
EXT DRO >C28-C36	**1200**	10.0	06/30/2025	ND					

Surrogate: 1-Chlorooctane *122 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *363 %* *40.6-153*

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

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 03 @ 1' (H253918-06)

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	06/30/2025	ND	1.95	97.3	2.00	5.34	
Toluene*	<0.050	0.050	06/30/2025	ND	1.98	98.8	2.00	4.43	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	2.01	101	2.00	4.81	
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.97	99.6	6.00	5.07	
Total BTEX	<0.300	0.300	06/30/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**768**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/30/2025	ND	192	96.2	200	2.35	
DRO >C10-C28*	**438**	10.0	06/30/2025	ND	189	94.4	200	1.46	
EXT DRO >C28-C36	**84.4**	10.0	06/30/2025	ND					

Surrogate: 1-Chlorooctane *99.0 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *106 %* *40.6-153*

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

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 03 @ 2'R (H253918-07)

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	06/30/2025	ND	1.95	97.3	2.00	5.34	
Toluene*	<0.050	0.050	06/30/2025	ND	1.98	98.8	2.00	4.43	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	2.01	101	2.00	4.81	GC-NC
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.97	99.6	6.00	5.07	
Total BTEX	<0.300	0.300	06/30/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *117 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1020**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**12.5**	10.0	06/30/2025	ND	192	96.2	200	2.35	
DRO >C10-C28*	**1320**	10.0	06/30/2025	ND	189	94.4	200	1.46	
EXT DRO >C28-C36	**233**	10.0	06/30/2025	ND					

Surrogate: 1-Chlorooctane *99.7 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *126 %* *40.6-153*

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

CARDINAL Laboratories

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Analytical Results For:

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

Received:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 04 @ 0' (H253918-08)

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	06/30/2025	ND	1.95	97.3	2.00	5.34	
Toluene*	<0.050	0.050	06/30/2025	ND	1.98	98.8	2.00	4.43	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	2.01	101	2.00	4.81	
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.97	99.6	6.00	5.07	
Total BTEX	<0.300	0.300	06/30/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.9 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/30/2025	ND	192	96.2	200	2.35	
DRO >C10-C28*	**10.7**	10.0	06/30/2025	ND	189	94.4	200	1.46	
EXT DRO >C28-C36	<10.0	10.0	06/30/2025	ND					

Surrogate: 1-Chlorooctane *102 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *102 %* *40.6-153*

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

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 05 @ 0' (H253918-09)

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	06/30/2025	ND	1.95	97.3	2.00	5.34	
Toluene*	<0.050	0.050	06/30/2025	ND	1.98	98.8	2.00	4.43	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	2.01	101	2.00	4.81	
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.97	99.6	6.00	5.07	
Total BTEX	<0.300	0.300	06/30/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/30/2025	ND	192	96.2	200	2.35	
DRO >C10-C28*	<10.0	10.0	06/30/2025	ND	189	94.4	200	1.46	
EXT DRO >C28-C36	<10.0	10.0	06/30/2025	ND					

Surrogate: 1-Chlorooctane *90.9 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *89.6 %* *40.6-153*

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

CARDINAL Laboratories

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:	06/30/2025	Sampling Date:	06/26/2025
Reported:	07/07/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 06 @ 0' (H253918-10)

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	06/30/2025	ND	1.95	97.3	2.00	5.34	
Toluene*	<0.050	0.050	06/30/2025	ND	1.98	98.8	2.00	4.43	
Ethylbenzene*	<0.050	0.050	06/30/2025	ND	2.01	101	2.00	4.81	
Total Xylenes*	<0.150	0.150	06/30/2025	ND	5.97	99.6	6.00	5.07	
Total BTEX	<0.300	0.300	06/30/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.6 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	07/01/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/30/2025	ND	192	96.2	200	2.35	
DRO >C10-C28*	<10.0	10.0	06/30/2025	ND	189	94.4	200	1.46	
EXT DRO >C28-C36	<10.0	10.0	06/30/2025	ND					

Surrogate: 1-Chlorooctane *94.5 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *94.6 %* *40.6-153*

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

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource
Project Manager: Chad Hensley
Address: 3101 Boyd drive
City: Carlsbad State: NM Zip: 88220
Phone #: 575-200-6167 Fax #:
Project #: 25A-03510 Project Owner:
Project Name: ~~PLU Big Sinks~~ PLU Big Sinks 25 BH's
Project Location:
Sampler Name: Riley Arnold

BILL TO
P.O. #:
Company: ExxonMobil
Attn: Ashley Mcafee
Address: 3104 E Greene St
City: Carlsbad
State: NM Zip: 88220
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	Chloride
H253918																	
1	BH25-01@0'	G	1			X					X		6.26.25		X	X	X
2	BH25-01@1'																
3	BH25-02@0'																
4	BH25-02@1'																
5	BH25-03@0'																
6	BH25-03@1'																
7	BH25-03@2'R																
8	BH25-04@0'																
9	BH25-05@0'																
10	BH25-06@0'																

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Relinquished By: [signature] Date: 6.30.25 Time: 1210 Received By: SRodriguez
Relinquished By: Date: Time: Received By:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 1.4 Corrected Temp. °C 1.7
Sample Condition: Cool Yes / No Intact Yes / No
CHECKED BY: (Initials) SR

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address: Rarnold@vertexresource.com; Chensley@vertexresource.com
REMARKS:
Jars are Labeled "BH25-xx"
Please label as "BH25-xx" as they are on COC

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #140
Correction Factor +0.3°C
Bacteria (only) Sample Condition: Cool Yes / No Intact Yes / No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.0 02/12/25

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

Received by OCD: 12/17/2025 8:43:46 AM

Released to Imaging: 12/30/2025 4:28:19 PM

CARDINAL Laboratories

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

August 18, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: PLU BIG SINKS 25 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/12/25 12:40.

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 0' (H254959-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2025	ND	1.72	85.9	2.00	5.27	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	5.79	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.89	94.5	2.00	6.04	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.86	97.7	6.00	7.14	
Total BTEX	<0.300	0.300	08/13/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**14800**	16.0	08/13/2025	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	**47.6**	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	**23.9**	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *111 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *117 %* *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:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 1' (H254959-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2025	ND	1.72	85.9	2.00	5.27	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	5.79	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.89	94.5	2.00	6.04	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.86	97.7	6.00	7.14	
Total BTEX	<0.300	0.300	08/13/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *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	**2400**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	<10.0	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *118 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *122 %* *40.6-153*

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Analytical Results For:

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

Received:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 2' (H254959-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2025	ND	1.72	85.9	2.00	5.27	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	5.79	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.89	94.5	2.00	6.04	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.86	97.7	6.00	7.14	
Total BTEX	<0.300	0.300	08/13/2025	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	**1040**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	<10.0	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *116 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *121 %* *40.6-153*

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Analytical Results For:

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

Received:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 3' (H254959-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2025	ND	1.72	85.9	2.00	5.27	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	5.79	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.89	94.5	2.00	6.04	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.86	97.7	6.00	7.14	
Total BTEX	<0.300	0.300	08/13/2025	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	**1440**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	**10.1**	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *115 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *120 %* *40.6-153*

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Analytical Results For:

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

Received:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 4' (H254959-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2025	ND	1.72	85.9	2.00	5.27	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	5.79	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.89	94.5	2.00	6.04	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.86	97.7	6.00	7.14	
Total BTEX	<0.300	0.300	08/13/2025	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1310**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	<10.0	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *123 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *129 %* *40.6-153*

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Analytical Results For:

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

Received:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 5' (H254959-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2025	ND	1.72	85.9	2.00	5.27	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	5.79	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.89	94.5	2.00	6.04	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.86	97.7	6.00	7.14	
Total BTEX	<0.300	0.300	08/13/2025	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	**960**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	<10.0	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *115 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *119 %* *40.6-153*

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Analytical Results For:

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

Received:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 6' (H254959-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2025	ND	1.72	85.9	2.00	5.27	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	5.79	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.89	94.5	2.00	6.04	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.86	97.7	6.00	7.14	
Total BTEX	<0.300	0.300	08/13/2025	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	**416**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	<10.0	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *110 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *114 %* *40.6-153*

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Analytical Results For:

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

Received:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 7' (H254959-08)

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	08/13/2025	ND	1.89	94.4	2.00	19.5	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	12.2	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.82	91.0	2.00	6.44	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.51	91.8	6.00	5.55	
Total BTEX	<0.300	0.300	08/13/2025	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	**240**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	<10.0	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *114 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *118 %* *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:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 8' (H254959-09)

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	08/13/2025	ND	1.89	94.4	2.00	19.5	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	12.2	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.82	91.0	2.00	6.44	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.51	91.8	6.00	5.55	
Total BTEX	<0.300	0.300	08/13/2025	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	**256**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	<10.0	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *110 %* *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:	08/12/2025	Sampling Date:	08/08/2025
Reported:	08/18/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25 - 01 @ 9' (H254959-10)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2025	ND	1.89	94.4	2.00	19.5	
Toluene*	<0.050	0.050	08/13/2025	ND	1.84	92.0	2.00	12.2	
Ethylbenzene*	<0.050	0.050	08/13/2025	ND	1.82	91.0	2.00	6.44	
Total Xylenes*	<0.150	0.150	08/13/2025	ND	5.51	91.8	6.00	5.55	
Total BTEX	<0.300	0.300	08/13/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *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	**320**	16.0	08/13/2025	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2025	ND	198	99.0	200	0.962	
DRO >C10-C28*	<10.0	10.0	08/13/2025	ND	189	94.4	200	0.866	
EXT DRO >C28-C36	<10.0	10.0	08/13/2025	ND					

Surrogate: 1-Chlorooctane *110 %* *44.4-145*

Surrogate: 1-Chlorooctadecane *116 %* *40.6-153*

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Page 105 of 126

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource
Project Manager: Chad Hensley
Address: 3101 Boyd drive
City: Carlsbad State: NM Zip: 88220
Phone #: 575-200-6167 Fax #:
Project #: 25A-03510 Project Owner:
Project Name: PLU BiG Sinks 25 Fed Battery
Project Location:
Sampler Name: Riley Arnold

BILL TO
P.O. #: 1081011001
Company: Exxon Mobil
Attn: Ashley McAfee
Address: 3104 E Greene St
City: Carlsbad
State: NM Zip: 88220
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX	TPH	Chloride
H254959																	
1	TP25-01 @ 0'	G	1			X					X		8.8.25	9:30	X	X	X
2	TP25-01 @ 1'													9:50			
3	TP25-01 @ 2'													10:15			
4	TP25-01 @ 3'													10:30			
5	TP25-01 @ 4'													10:52			
6	TP25-01 @ 5													11:25			
7	TP25-01 @ 6													11:37			
8	TP25-01 @ 7													12:00			
9	TP25-01 @ 8													1:00			
10	TP25-01 @ 9													1:05			

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Relinquished By: Date: 8-12-25 Time: 1240 Received By:
Relinquished By: Date: Time: Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
Chensley@vertexresource.com
REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 2.8
Corrected Temp. °C 3.1
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) JO

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #140
Correction Factor +0.3°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.0 02/12/25

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

Received by OCD: 12/17/2025 8:43:46 AM
Released to Imaging: 12/30/2025 4:28:19 PM

CARDINAL Laboratories

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

September 24, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: PLU BIG SINKS 25 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 09/18/25 13:15.

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	09/18/2025	Sampling Date:	09/16/2025
Reported:	09/24/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 08 @ 0.5' (H255842-01)

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	09/20/2025	ND	1.94	96.8	2.00	1.15	
Toluene*	<0.050	0.050	09/20/2025	ND	2.04	102	2.00	0.779	
Ethylbenzene*	<0.050	0.050	09/20/2025	ND	2.04	102	2.00	0.146	
Total Xylenes*	<0.150	0.150	09/20/2025	ND	5.97	99.6	6.00	0.0908	
Total BTEX	<0.300	0.300	09/20/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/19/2025	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	09/19/2025	ND	234	117	200	1.16	
DRO >C10-C28*	<10.0	10.0	09/19/2025	ND	225	112	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	09/19/2025	ND					

Surrogate: 1-Chlorooctane *106 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *102 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	09/18/2025	Sampling Date:	09/16/2025
Reported:	09/24/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: BH 25 - 09 @ 0.5' (H255842-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/20/2025	ND	1.94	96.8	2.00	1.15	
Toluene*	<0.050	0.050	09/20/2025	ND	2.04	102	2.00	0.779	
Ethylbenzene*	<0.050	0.050	09/20/2025	ND	2.04	102	2.00	0.146	
Total Xylenes*	<0.150	0.150	09/20/2025	ND	5.97	99.6	6.00	0.0908	
Total BTEX	<0.300	0.300	09/20/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: KH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/19/2025	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	09/19/2025	ND	234	117	200	1.16	
DRO >C10-C28*	<10.0	10.0	09/19/2025	ND	225	112	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	09/19/2025	ND					

Surrogate: 1-Chlorooctane *103 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *98.9 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vestex Resource
Project Manager: Chad Hensley
Address: 3101 Boyd drive
City: Carlsbad State: NM Zip: 88220
Phone #: Fax #:
Project #: 25A-03510 Project Owner:
Project Name: PLU Big Sinks 25 Fed Battery
Project Location:
Sampler Name: Riley Arnold

BILL TO
P.O. #:
Company: Exxon Mobil
Attn: Ashley Mcafee
Address: 3104 E Greene st
City: Carlsbad
State: NM Zip: 88220
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX	TPH	Chloride
H255842-1	BH25-08 @ 0.5'	G	1			X					X		9.16.25	11:50	X	X	X
2	BH25-09 @ 0.5'	G	1			X					X		9.16.25	11:58	X	X	X

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Relinquished By: Riley Arnold Date: 9-18-25 Time: 1315
Received By:
Relinquished By: Date: Time:
Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
chensley@vestexresource.com
REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 2.8
Corrected Temp. °C 3.1
Sample Condition: Cool ☑ Yes Intact ☑ Yes ☐ No ☐ No
CHECKED BY: (Initials) DG

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #140
Correction Factor -0.6°C +0.3°
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.3 08/05/24

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

Received by OCD: 12/17/2025 8:43:46 AM

Released to Imaging: 12/30/2025 4:28:19 PM

CARDINAL Laboratories

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

November 21, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: PLU BIG SINKS 25 FED BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/17/25 12:42.

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	11/17/2025	Sampling Date:	11/13/2025
Reported:	11/21/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Tamara Oldaker
Project Location:	EXXON MOBIL		

Sample ID: TP25-02 @ 4' (H257217-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/19/2025	ND	2.17	109	2.00	0.493	
Toluene*	<0.050	0.050	11/19/2025	ND	2.12	106	2.00	0.821	
Ethylbenzene*	<0.050	0.050	11/19/2025	ND	2.04	102	2.00	1.50	
Total Xylenes*	<0.150	0.150	11/19/2025	ND	6.18	103	6.00	1.43	
Total BTEX	<0.300	0.300	11/19/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.9 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	11/18/2025	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	11/18/2025	ND	183	91.4	200	3.09	
DRO >C10-C28*	<10.0	10.0	11/18/2025	ND	201	100	200	3.03	
EXT DRO >C28-C36	<10.0	10.0	11/18/2025	ND					

Surrogate: 1-Chlorooctane *85.1 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *71.8 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Page 114 of 126

Received by OCD: 12/17/2025 8:43:46 AM

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource
Project Manager: Chad Hensley
Address: 3101 Boyd drive
City: Carlsbad State: NM Zip: 88220
Phone #: 575-200-6167 Fax #:
Project #: 25A-03510 Project Owner:
Project Name: PLU BiG Sinks 25 Fed Battery
Project Location:
Sampler Name: Riley Arnold

BILL TO
P.O. #: 1081011001
Company: ExxonMobil
Attn: Dale Woodall
Address: 3104 E Greene St
City: Carlsbad
State: NM Zip: 88220
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	Chloride
H257217-1	TP25-02 @ 4'	G	1			X					X		11.13.25	11:00	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by 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 service. In no event shall Cardinal be liable for incidental or consequental 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 hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

0402401K

Relinquished By: Date: 11-17-25 Time: 1242 Received By:
Relinquished By: Date: Time: Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
chensley@vertexresource.com
REMARKS:
GFCM: 48605000

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C -0.1 Corrected Temp. °C 0.2
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials)

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #140 Correction Factor -0.6°C +0.3°
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

11/13/25

FORM-006 R 3.3 08/05/24

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

Released to Imaging: 12/30/2025 4:28:19 PM

CARDINAL Laboratories

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

December 12, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: PLU BIG SINKS 25 FED BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 12/08/25 12:13.

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	12/08/2025	Sampling Date:	12/05/2025
Reported:	12/12/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH25 - 10 @ 0-6" (H257600-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2025	ND	1.75	87.6	2.00	0.958	
Toluene*	<0.050	0.050	12/09/2025	ND	1.83	91.6	2.00	2.50	
Ethylbenzene*	<0.050	0.050	12/09/2025	ND	1.92	96.2	2.00	5.41	
Total Xylenes*	<0.150	0.150	12/09/2025	ND	5.86	97.6	6.00	6.94	
Total BTEX	<0.300	0.300	12/09/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *132 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	12/08/2025	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	12/09/2025	ND	206	103	200	6.77	
DRO >C10-C28*	<10.0	10.0	12/09/2025	ND	227	114	200	6.52	
EXT DRO >C28-C36	<10.0	10.0	12/09/2025	ND					

Surrogate: 1-Chlorooctane *77.2 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *77.2 %* *39.9-141*

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	12/08/2025	Sampling Date:	12/05/2025
Reported:	12/12/2025	Sampling Type:	Soil
Project Name:	PLU BIG SINKS 25 FED BATTERY	Sampling Condition:	Cool & Intact
Project Number:	25A - 03510	Sample Received By:	Shalyn Rodriguez
Project Location:	EXXON MOBIL		

Sample ID: BH25 - 11 @ 0-6" (H257600-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2025	ND	1.75	87.6	2.00	0.958	
Toluene*	<0.050	0.050	12/09/2025	ND	1.83	91.6	2.00	2.50	
Ethylbenzene*	<0.050	0.050	12/09/2025	ND	1.92	96.2	2.00	5.41	
Total Xylenes*	<0.150	0.150	12/09/2025	ND	5.86	97.6	6.00	6.94	
Total BTEX	<0.300	0.300	12/09/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *130 %* *70.4-141*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	12/08/2025	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	12/09/2025	ND	206	103	200	6.77	
DRO >C10-C28*	<10.0	10.0	12/09/2025	ND	227	114	200	6.52	
EXT DRO >C28-C36	<10.0	10.0	12/09/2025	ND					

Surrogate: 1-Chlorooctane *77.6 %* *52.4-130*

Surrogate: 1-Chlorooctadecane *77.3 %* *39.9-141*

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource
Project Manager: Chad Hensley
Address: 3101 Boyd drive
City: Carlsbad State: NM Zip: 88220
Phone #: 575-200-6167 Fax #:
Project #: 25-03510 Project Owner:
Project Name: PLU BiG Sinks 25 Fed Battery
Project Location:
Sampler Name: Riley Arnold

BILL TO
P.O. #: 1081011001
Company: ExxonMobil
Attn: Dale Woodall
Address: 3104 E Greene St
City: Carlsbad
State: NM Zip: 88220
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING DATE	SAMPLING TIME	BTEX	TPH	Chloride
H257600																	
1	BH25-10 @ 0-6"	G	1			X					X		12.5.25	12:50	X	X	X
2	BH25-11 @ 0-6"	G	1			X					X		12.5.25	1:00	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by 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 service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

D402401K

Relinquished By: Date: 12.8.25 Time: 1213 Received By:
Relinquished By: Date: Time: Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
chensley@vertexresource.com Rarnold@vertexresource.com
REMARKS:
GFLM: 48605000

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:
Observed Temp. °C 22.3
Corrected Temp. °C 2.5
Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
CHECKED BY: (Initials) SK

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #140
Correction Factor -0.6°C +0.3
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.3 08/05/24

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

Received by OCD: 12/17/2025 8:43:46 AM

Released to Imaging: 12/30/2025 4:28:19 PM

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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

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 535744
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2517135924**
Incident Name	**NAPP2517135924 PLU BIG SINKS 25 FEDERAL BATTERY @ FAPP2123047138**
Incident Type	**Produced Water Release**
Incident Status	**Deferral Request Received**
Incident Facility	**[fAPP2123047138] BIG SINKS 25 1**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	PLU BIG SINKS 25 FEDERAL BATTERY
Date Release Discovered	06/15/2025
Surface Owner	State

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 | Pump | Produced Water | Released: 33 BBL | Recovered: 30 BBL | Lost: 3 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)	30 bbls of produced water were released in containment, and 3 bbls of water were released on a permeable surface. 30 bbls of produced water were recovered from the lined containment. 3 bbls of produced water were not recovered from permeable surface.

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State of New Mexico
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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 535744
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

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

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/17/2025

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Energy, Minerals and Natural Resources
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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 535744
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

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

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	14800
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	10977
GRO+DRO (EPA SW-846 Method 8015M)	9777
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	06/26/2025
On what date will (or did) the final sampling or liner inspection occur	08/18/2025
On what date will (or was) the remediation complete(d)	08/18/2025
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	0
What is the estimated volume (in cubic yards) that will be remediated	0
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 535744
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	*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)	Yes
Other Non-listed Remedial Process. Please specify	no excavation was conducted. a deferral for leaving impacted soils in place is requested.
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/17/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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Oil Conservation Division
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Santa Fe, NM 87505

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 535744
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	tank battery and associated infrastructure would need to be decommissioned and removed for excavation to occur
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	4824
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	536
Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	
Enter the facility ID (f#) on which this deferral should be granted	fAPP2123047138 BIG SINKS 25 1
Enter the well API (30-) on which this deferral should be granted	*Not answered.*
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/17/2025

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

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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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 535744
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	***{Unavailable.}***

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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

General Information
Phone: (505) 629-6116

Online Phone Directory
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State of New Mexico
Energy, Minerals and Natural Resources
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CONDITIONS

Action 535744

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 535744
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
scwells	Deferral approved. Deferral of BH25-03 is approved until plugging and abandonment or a major facility deconstruction, whichever comes first. A complete and accurate remediation report and/or reclamation report will need to be submitted at that time.	12/30/2025