
August 29, 2025

EMNRD – Oil Conservation Division
506 W. Texas
Artesia, New Mexico 88210

SUBJECT: Liner Inspection and Closure Report for Muskie 23 CTB 5 –August 11, 2025 Site Visit

Incident IDs: nAPP2513262998/nAPP2518939990
Facility ID (Name): fAPP2317134046 (MUSKIE 23 CTB 5)
Facility Location: Unit A of Section 23, Township 26 South, Range 34 East, New Mexico
Facility GPS Coordinates: 32.033148, -103.435555
Lea County, New Mexico

Introduction

KLJ Engineering (KLJ) has prepared this report on behalf of Devon Energy Production Company, LP (Devon) to detail the recent liner inspection conducted at the Muskie 23 CTB 5 (Site) on August 11, 2025. The inspection followed the release of produced water that occurred on May 11, 2025 (Incident ID nAPP2513262998) and July 7, 2025 (Incident ID nAPP2518939990).

Site Information and Background

The Site is located approximately 14.27 miles southwest of Jal, New Mexico, on Bureau of Land Management (BLM) property. The Site lies within Unit A, Section 23, Township 26 South, Range 34 East, in Lea County. KLJ conducted a liner inspection and associated site characterization in accordance with 19.15.29.11 and 19.15.29.12 of the New Mexico Administrative Code (NMAC) to assess the integrity of the containment system and evaluate any potential environmental impacts resulting from a release.

Release Descriptions and Immediate Response

INCIDENT ID nAPP2513262998

On May 11, 2025, a Devon lease operator discovered a pinhole leak on a welded T inside the secondary containment, resulting in the release of approximately 360 barrels (bbls) of produced water. On May 12, 2025, Devon Energy submitted the initial Notice of Release (NOR) to the New Mexico Energy, Minerals, and Natural Resources Department – Oil Conservation Division (NMOCD) via the Operator's Electronic Permitting and Payment Portal. The May 11, 2025 release exceeded 25 bbls and was classified as a *major release* under 19.15.29.7(A)(1) NMAC, requiring enhanced notification procedures.

In compliance with 19.15.29.8(A)(1) NMAC, Devon provided verbal and email notification to the NMOCD Environmental Bureau Chief and the appropriate Division District Office within 24 hours of discovery. A Form C-141 for the incident was submitted on May 20, 2025, in accordance with 19.15.29.9(A)(1) and 19.15.29.10(A)(1)(2) NMAC. The Form C-141 confirmed prior notifications and provided updated release details, fulfilling major release reporting requirements.

INCIDENT ID nAPP2518939990

On July 7, 2025, a Devon lease operator discovered a pinhole leak on a water line inside the secondary containment, resulting in the release of approximately 9 bbls of produced water. The NOR for this release

was submitted on July 8, 2025. As the incident did not exceed the 25 bbl threshold, it was not classified as a major release. A Form C-141 was submitted on July 15, 2025, via the NMOCD Portal.

Immediate Response Actions

For both releases, the operator completed the following initial actions:

- Isolated and eliminated the source of the release.
- Photographically documented the affected area, including secondary containment, liner, tanks, and equipment.
- Estimated the volume released.
- Recovered released fluids to the extent practicable.

Site Characterization Summary

The Site lies within Qe/Qp – Intermixed sands with local peat deposits, including Quaternary eolian sand with local peat deposits and fine to medium wind-blown sands forming stabilized sheets and ridges. Local Peat occurs in depressions with poor drainage and represents eolian and intermittent wetland deposition on piedmont slopes (e.g., USGS and NM Bureau of Geology). Terrain for the Site and immediate surrounding area includes plains, uplands, dunes, interdunal areas, and fan piedmonts at elevations ranging from 2,800 to 5,000 feet above mean sea level (amsl). Parent material consists of mixed alluvium and or eolian sands derived from sedimentary rock, with 8 to 13 inches of average annual precipitation. Soil within the Site tends to be well-drained, with negligible runoff potential and low water-holding capacity.

The USDA – Web Soil Survey (WSS) identifies the predominant soil type at the Site as the Pyote and Maljamar fine sands that is moderately deep to very deep, with surface textures ranging from loamy fine sand, fine sandy loam, loamy very fine sand or gravelly sandy loam. Subsurface consists of loamy fine sand, coarse sandy loam, fine sandy loam or loam that averages less than 18 percent clay and less than 15 percent carbonates. Substratum includes a fine sandy loam or gravelly fine sandy loam with less than 15 percent gravel and less than 40 percent calcium carbonate.

Vegetation reflects black grama, dropseeds, and bluestems, with scattered occurrences of shinney oak and sage. Ground cover consists of perennial and annual forbs, grasses, and bare ground, with composition varying based on precipitation. Declines in black grama can result in a transition toward a grass/shrub or shrub-dominated state, often featuring honey mesquite, snakeweed, sand sage, and shinnery oak. These changes are influenced by factors such as heavy grazing, drought, erosion, bare patches, and historical fire suppression, which promote shrub encroachment and reduce grass cover, leading to increased erosion potential and a competitive advantage for shrubs over grasses.

No surface water features were identified within 300 feet of the Site. The nearest significant watercourse is 0.9 miles northwest; the closest playa lake is 3.12 miles south, and the nearest wetland is 1.66 miles west (USFWS NWI, 2025). These distances comply with the requirements of 19.15.29.12(C)(4) NMAC.

Per the New Mexico Office of the State Engineer (NMOSE) Points of Diversion (POD) Map, the nearest POD is C-04856-POD1, which is used to reference Depth to Groundwater (DTGW) and is located 0.18 miles southwest on an adjacent well pad. The POD is identified as a temporary borehole used to determine depth to groundwater. The well record indicates that the temporary borehole was drilled to a depth of 105 ft bgs, and no groundwater was encountered. The nearest water source, a domestic well used for stock watering purposes, is an NMOSE POD, C-02295, located 5.11 miles northwest of the Site.

Karst potential for the Site is identified as non-karst, with the nearest area of medium karst potential located 4.97 miles to the northwest. The Site is in a FEMA flood hazard area identified as FEMA Zone D (undetermined hazard); the nearest identified FEMA flood hazard area, classified as Zone AE, is 14.6 miles to the northeast.

Additional information detailing the results of the Site characterization findings can be found in **Appendix B**.

Closure Criteria

Table 1 summarizes key Site and incident information relevant to closure evaluation, as required under 19.15.29.12 NMAC. This includes details such as release source, location, containment status, and site-specific features that may influence closure requirements. While contamination thresholds, sampling depths, and applicable concentration limits are not listed in this table, the information provided supports regulatory assessment of whether the release meets criteria for closure. In accordance with NMAC 19.15.29.11(A)(5)(b), if the release occurred within lined, impermeable secondary containment with no evidence of escape, it may qualify for reduced remediation requirements or a No Further Action (NFA) determination.

Table 1: Release Information and Closure Criteria Limits			
Depth to Ground Water Determination: > 100 feet bgs			
Site Name	Muskie 23 CTB 5	Company	Devon Energy Production Company, LP
Facility ID	fAPP2317134046	PLSS GPS	A-23-26S-34E 32.033148, -103.435555
Lease ID	NMNM105858782	Land Status	BLM (Federal)
Incident ID(s)	nAPP2513262998 nAPP2518939990	Date Of Release(s)	5/11/2025 7/7/2025
Source of Release	Pinhole leak on welded T, and pinhole leak on water line inside containment	Volume Released/Recovered	360 bbls/360 bbls pw 9 bbls/9 bbls pw
Specific Features	No Karst Potential, DTGW pod within 0.5-mile radius, no surface water within proximity, and FEMA Zone D		

Liner Inspection Activities

For incident nAPP2513262998, a notification of inspection was submitted to Devon via email on June 16, 2025, with official notification submitted through the Operator's Electronic Permitting and Payment Portal on the same date. A subsequent official notification was submitted on June 26, 2025. However, both scheduled inspections were postponed due to weather-related conditions, which resulted in standing water within the containment. Email notifications regarding the postponements were submitted in accordance with 19.15.29.11(A)(5)(a)(iii) NMAC, and copies are included in Appendix C.

On August 7, 2025, an additional official notification was submitted for both nAPP2513262998 and nAPP2518939990 for an inspection to occur on August 11, 2025, in accordance with NMAC 19.15.29.11(A)(5)(a)(iii).

On August 7, 2025, KLJ, on behalf of Devon Energy, requested a 30-day extension from NMOCD to complete the liner inspection and closure report. The request was approved, giving an additional 90 days extending the submission deadline to November 6, 2025. See **Appendix C** for the request email.

KLJ Environmental Specialists conducted a site visit on August 11, 2025, to perform the liner inspection. During the visit, KLJ personnel conducted a visual inspection of the secondary containment to verify liner integrity. Observations included checks for perforations, tears, cuts, or weathering that could compromise containment performance. The liner was confirmed to be intact, with no observed integrity issues or conditions requiring repair or replacement. Photographic documentation is included in the Liner Inspection Field Notes & Photolog Report (**Appendix A**).

Conclusion

Based on the findings of the liner inspection, KLJ concludes that liner integrity is adequate to contain fluids and there are no further actions required in relation to incidents nAPP2513262998 and nAPP2518939990.

Based on the site assessment and activities conducted, Devon respectfully requests closure of incidents nAPP2513262998 and nAPP2518939990 with a No Further Action (NFA) determination.

Submitted and prepared by:

KLJ Engineering

Written By

Name: Monica Peppin

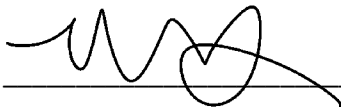
Title: Environmental Specialist II

Reviewed By

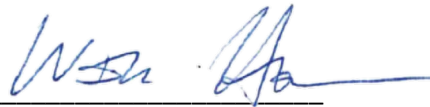
Name: Will Harmon, P.G.

Title: Environmental Project Manager

Signature: _____



Signature: _____



Included Appendices

Appendix A – LINER INSPECTION FIELD NOTES & PHOTOLOG REPORT

Appendix B – CLOSURE CRITERIA RESEARCH

Appendix C – CORRESPONDENCE


APPENDIX A

LINER INSPECTION FIELD NOTES & PHOTOLOG REPORT

Environmental Liner Inspection Field Notes & Photolog Report



Site & Incident Information

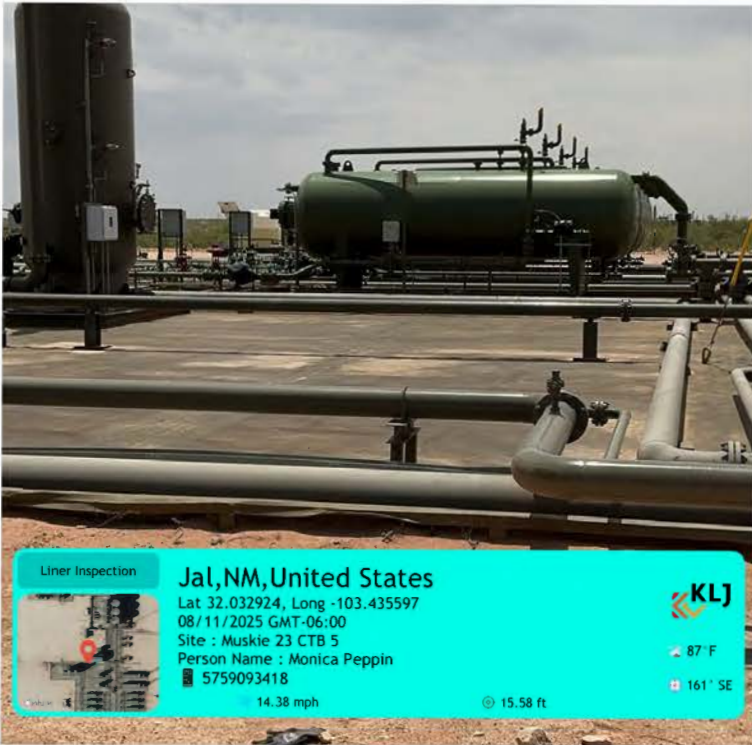
Client:	Devon Energy	Date:	8.11.2025
Site:	Muskie 23 CTB 5	Arrival Time:	10:03 AM
Incident ID:	nAPP2513262998 nAPP2518939990	 <p>Photo of Lease Sign</p>	
Client Contact:	Jim Raley		
Land Status:	BLM		
County:	Lea		
Lease ID:	NMNM		
Facility ID:	fAPP2408639251		
32.308038, -103.7206141			

Observations and Field Notes

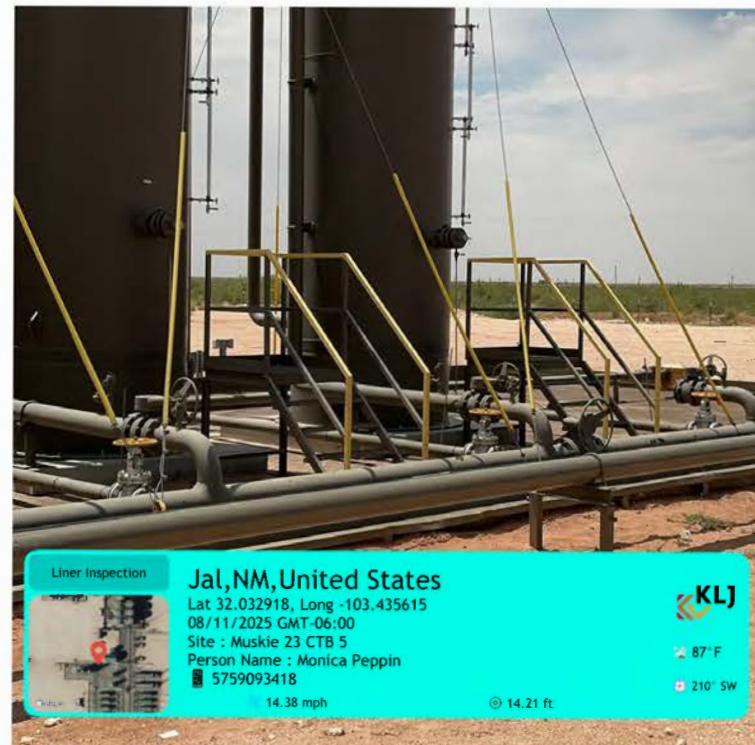
- 10:12 AM – Arrived on site. Observed site conditions for potential hazards and completed safety documentation.
- 10:18 AM – Reviewed correspondence from contractor and client. Verified correct containment for inspection and confirmed liner had been pressure washed and was ready for evaluation.
- 10:20 AM – Began inspection with 360-degree walkaround of containment area.
- 10:23 AM – Inspected liner walls and base for signs of abrasions, wear, or damage.
- 10:28 AM – Liner surface observed to be structurally sound with no visible perforations, tears, or areas of concern.
- 10:45 AM – Completed inspection. Photographs taken from all cardinal directions, between tanks, and from multiple angles documenting liner and equipment conditions.



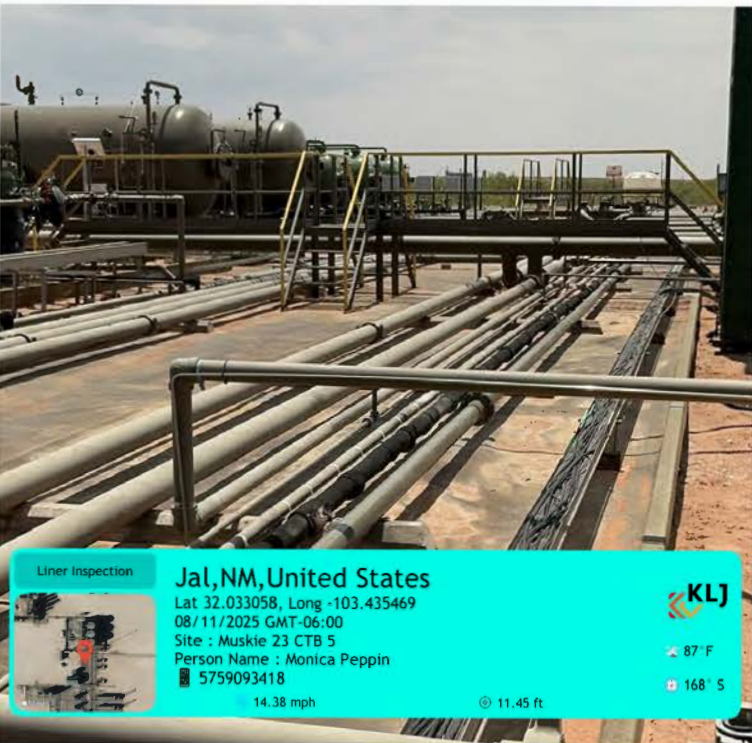
Photolog



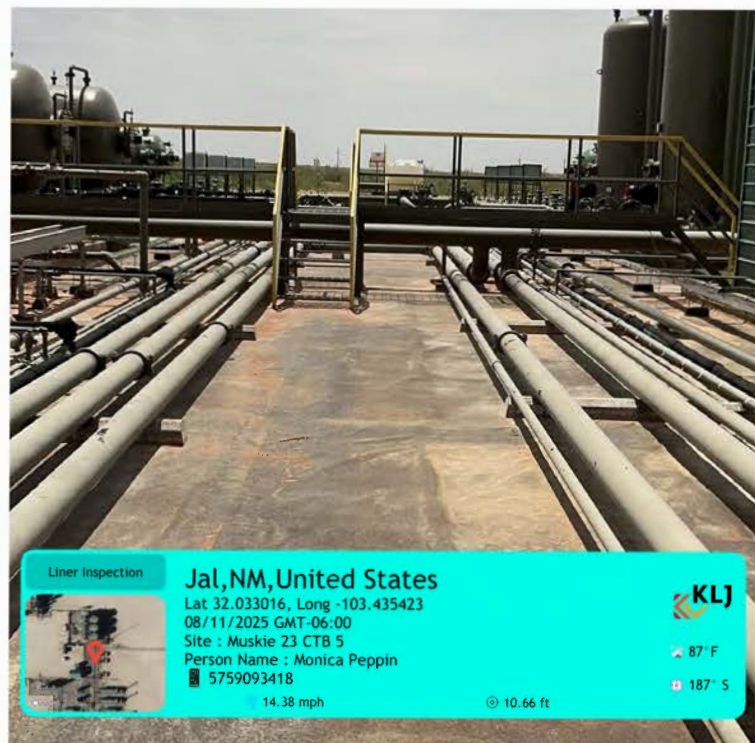
East side view from north end facing south.



Facing southwest viewing west side of containment area.



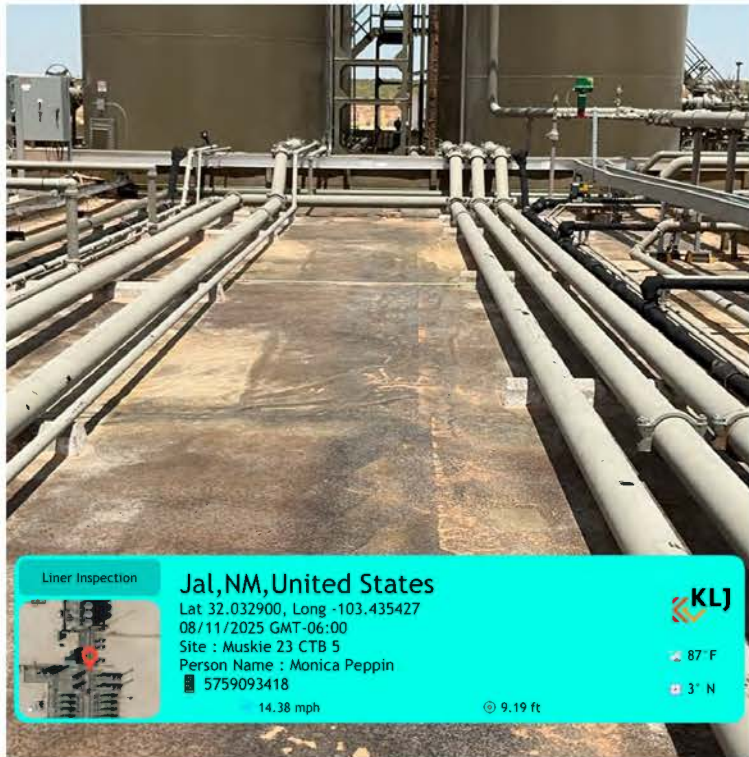
Liner in middle of containment under piping facing south from north end.



Facing south viewing middle of liner between piping from north end.



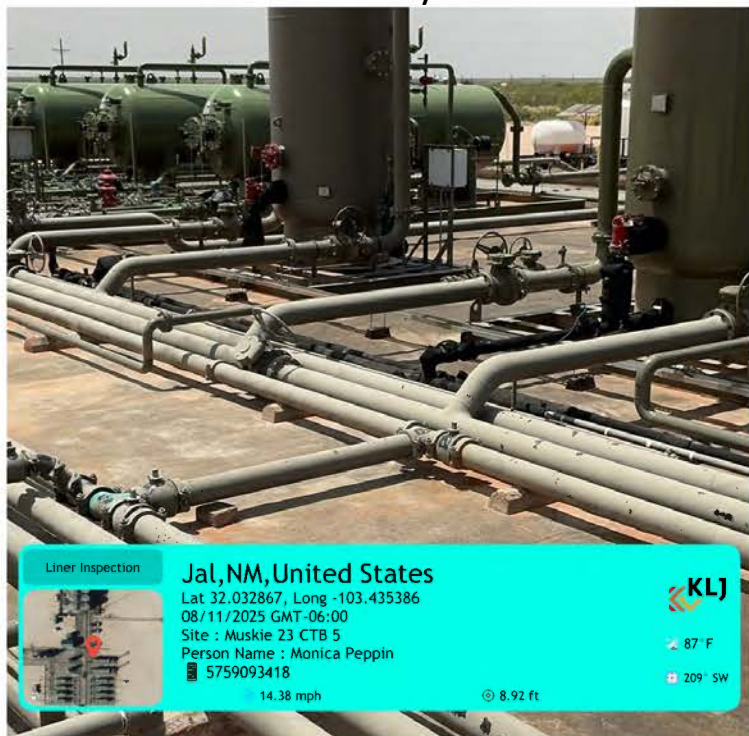
Photolog



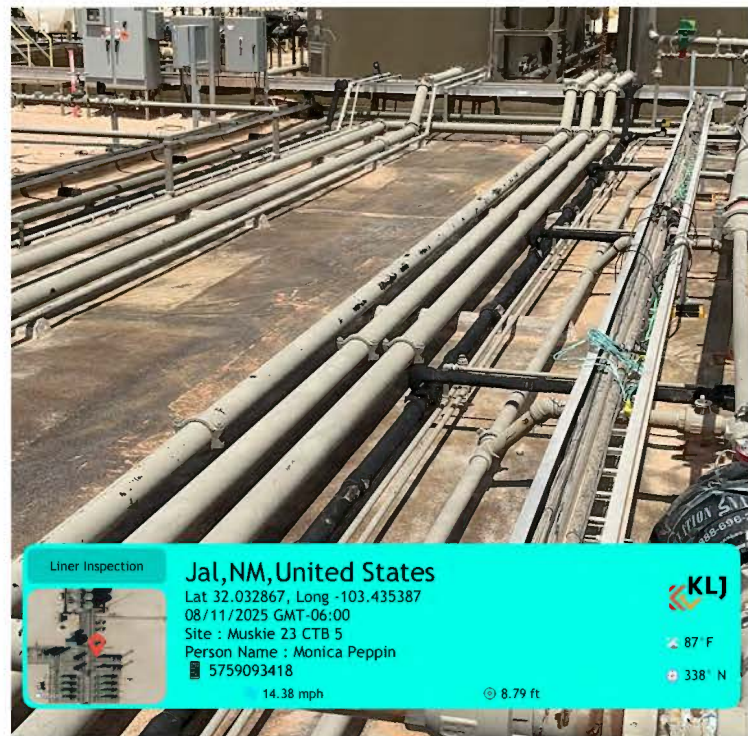
View of liner facing north towards tank battery.



Liner on west side viewing from the east.



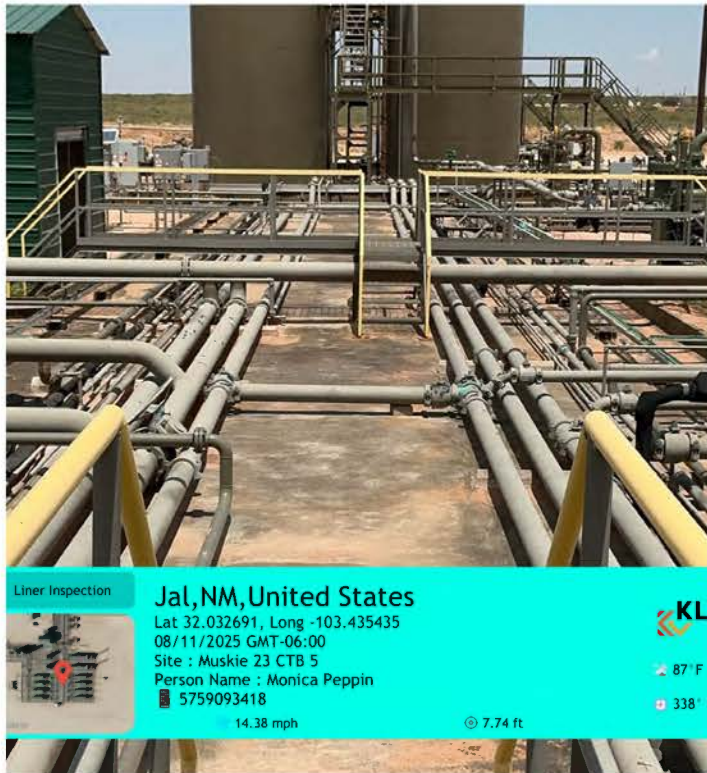
Liner in southwest area from middle section of containment facing southwest.



Liner on north end of containment facing northwest.



Photolog



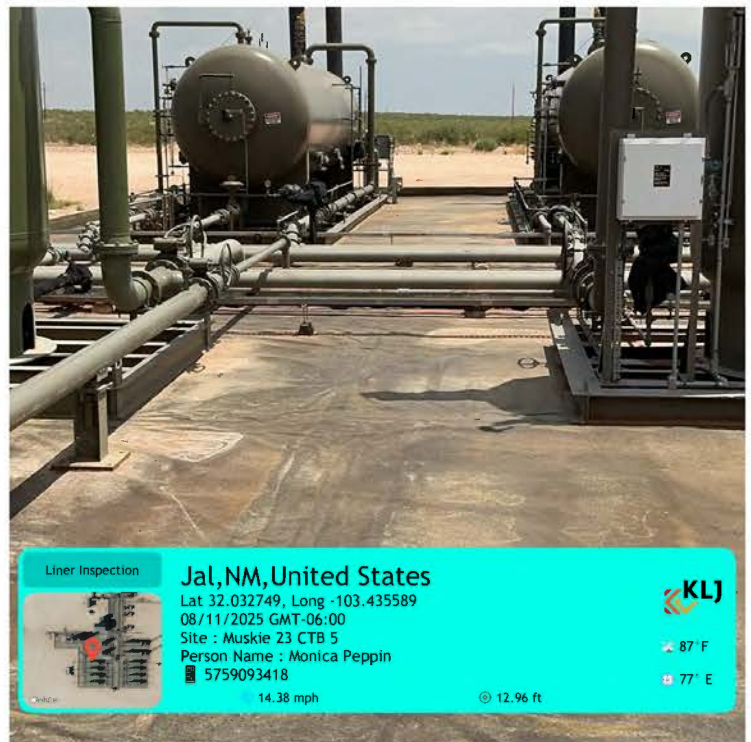
Facing north from southern end of liner in middle section.



Liner on west side from southeast area.



Liner under piping and separators facing northeast.



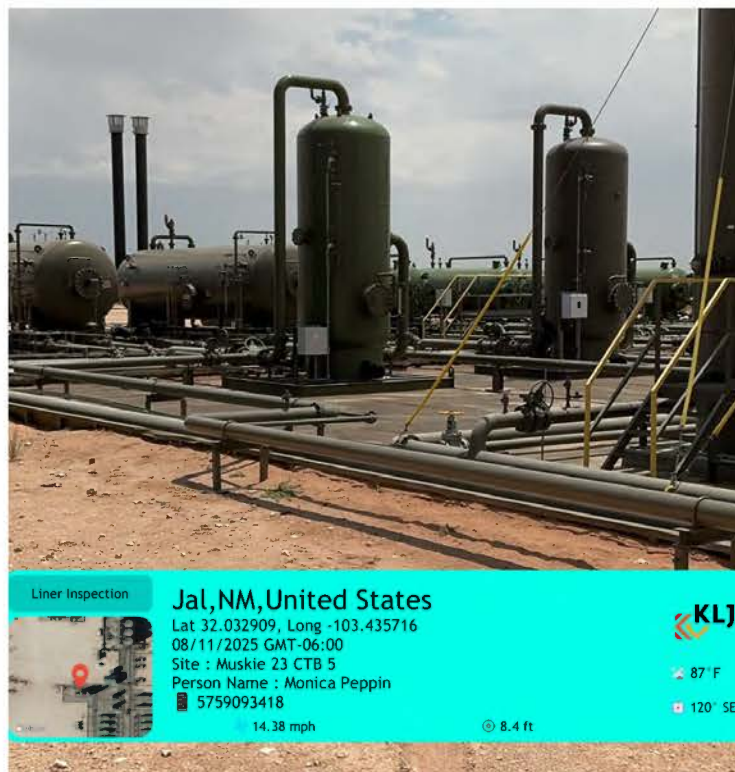
Liner on east side of containment.



Photolog



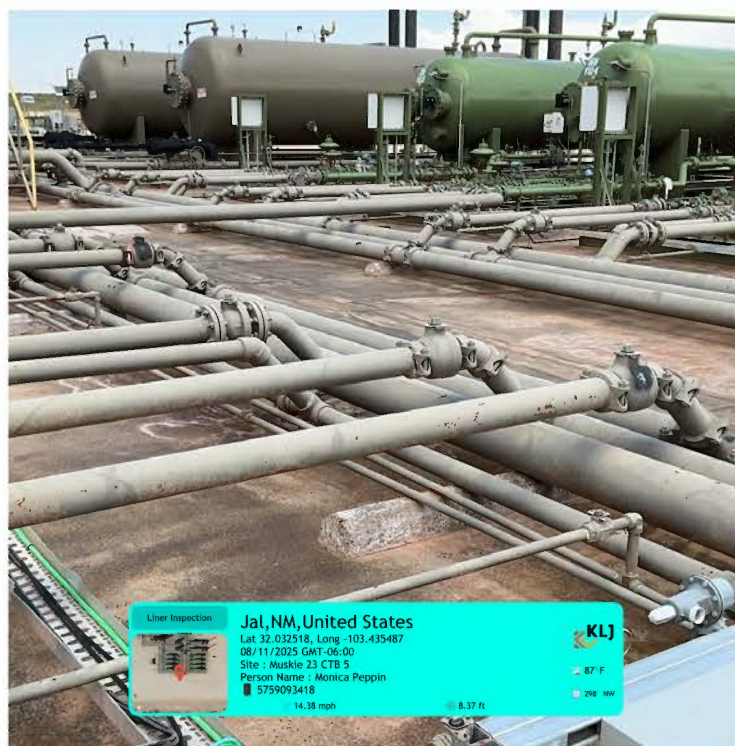
Facing west from east side viewing liner on north end.



North view from west side facing east.



West side view facing south from north end.



Liner between tanks facing south from north end.



Photolog



Facing northwest view of liner under piping.



View of liner in southwest corner.



South view of liner on west side.



View of liner facing northwest towards equipment.



Additional Notes & Recommendations

- Visual observation supported with photo documentation.
- No issues identified; liner integrity confirmed and meets closure criteria.
- Upload documents and complete liner inspection closure report.
- Submit final closure report for review to applicable regulatory agencies.

Acknowledgement & Signature

Technician: Monica Peppin

Date: August 11, 2025

Signature: _____

A handwritten signature in black ink, appearing to be 'Monica Peppin', written over a horizontal line.

Departure

Time: 11:36 AM

APPENDIX B

CLOSURE CRITERIA RESEARCH

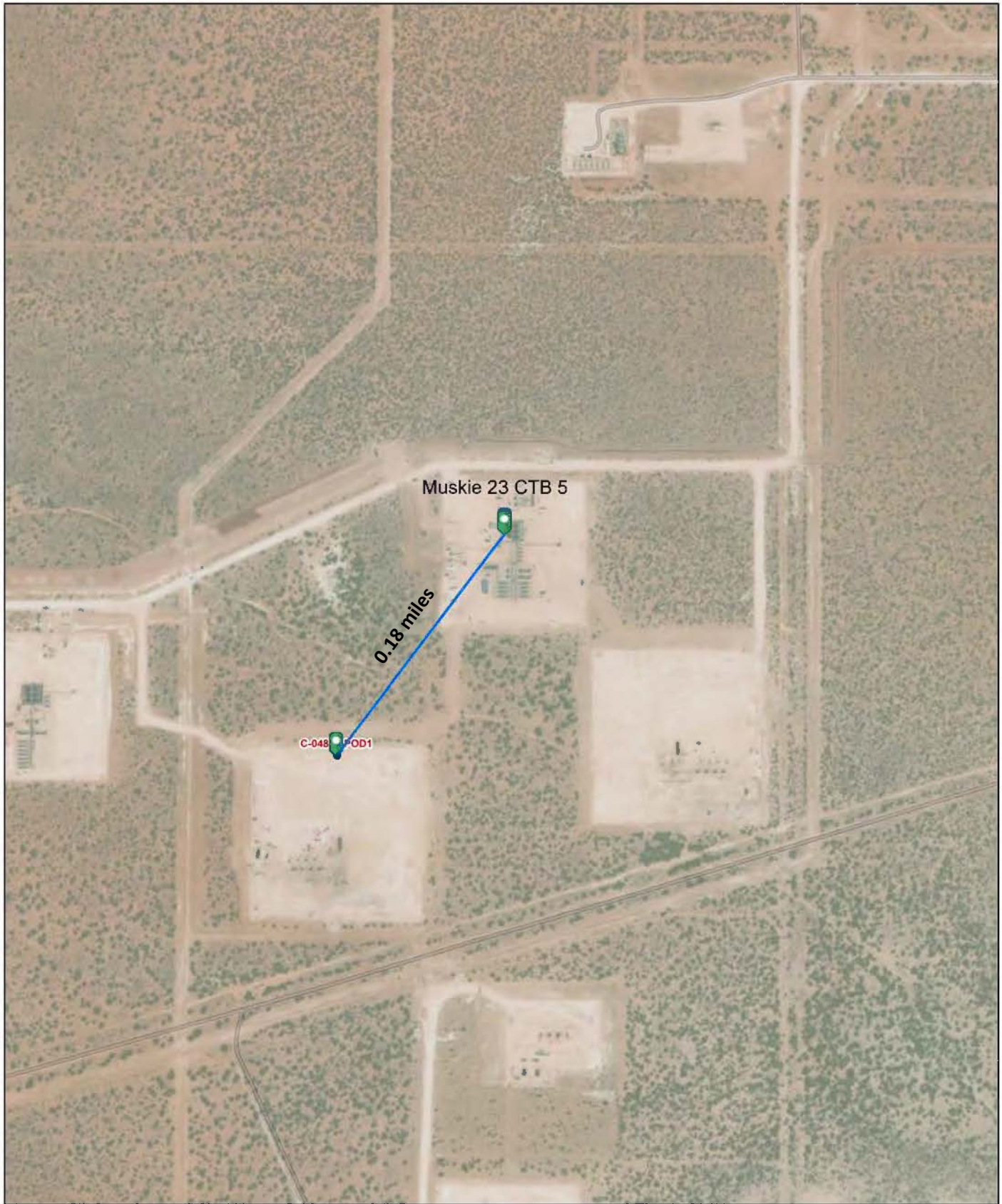
Muskie 23 CTB 5

Incident ID: nAPP2513262998
Containment Coordinates: 32.033148, -103.435555
Approximate Square Footage: 4,468 sq ft

Legend

- Containment Area
- Muskie 23 CTB 5



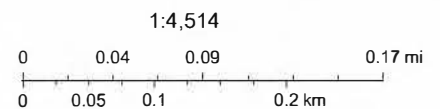


7/4/2025, 6:40:00 AM

- Override 1
- GIS WATERS PODs
 - Active
- OSE District Boundary
- Water Right Regulations
- Closure Area

Nearest DTGW Pod
C-04856-POD1
Distance
0.18 miles

Well Type
Temporary
Borehole
Well Depth
105 ft bgs



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Maxar



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO (WELL NO.) POD 1		WELL TAG ID NO N/A		OSE FILE NO(S) C-4856 POD 1			
	WELL OWNER NAME(S) Devon Energy Production Company				PHONE (OPTIONAL) 575-748-1838			
	WELL OWNER MAILING ADDRESS 205 E. Bender Road #150				CITY Hobbs		STATE NM	
					ZIP 88240			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 01	SECONDS 51.64	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE 103	26	14.78	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NO WD1188		NAME OF LICENSED DRILLER John Scarborough			NAME OF WELL DRILLING COMPANY John Scarborough Drilling Inc.		
	DRILLING STARTED 07/25/2024		DRILLING ENDED 07/25/2024		DEPTH OF COMPLETED WELL (FT) 105	BORE HOLE DEPTH (FT) 105	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	105	5	Soil Boring	-	-	-	-
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

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

FILE NO. <u>C-4856-POD 1</u>	POD NO. <u>1</u>	TRN NO. <u>763064</u>
LOCATION <u>Man 26.34.23-232</u>	WELL TAG ID NO. <u></u>	PAGE 1 OF 2

DEPTH (feet bgl)	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)	
					FROM
0	10	10	Silty Sand, Medium Brown to tan, Medium to fine grained	Y ✓ N	
10	20	10	Silty Sand, Medium brown to red, Medium to fine grained	Y ✓ N	
20	30	10	Sand with Gravel, light brown to white, fine to medium with some caliche gravel	Y ✓ N	
30	35	5	Sand with Gravel, light brown to white, fine to medium with some caliche gravel	Y ✓ N	
35	40	5	Sand with clay, light brown to white, fine to medium with some red clay	Y ✓ N	
40	48	4	Sand with Gravel, light brown to white, fine to medium with some caliche gravel	Y ✓ N	
48	55	8	Sandstone, Light brown to white, fine to coarse grained	Y ✓ N	
55	58	3	Sand with clay, light brown to yellow, very fine to medium with some grey clay	Y ✓ N	
58	60	2	Sand with clay, light brown to grey, very fine to medium with some grey clay	Y ✓ N	
60	68	8	Clay with sand, medium brown to red, with some medium brown sand	Y ✓ N	
68	70	2	Sand with clay, light to medium brown, very fine to medium with some grey clay	Y ✓ N	
70	74	4	Sand with clay medium brown to red, with some red clay	Y ✓ N	
74	80	6	Sand with clay, light brown to grey, very fine to medium with some grey clay	Y ✓ N	
80	90	10	Sand with clay, light brown to yellow, very fine to medium with some grey clay	Y ✓ N	
90	100	10	Silty Sand, light to medium brown, medium to fine grained	Y ✓ N	
100	105	5	Sand with Gravel, light brown to white, fine to medium with some caliche gravel	Y ✓ N	
105	105	0	Sand with Gravel, light brown to white, fine to medium with some caliche gravel	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:			TOTAL ESTIMATED WELL YIELD (gpm):		0.00
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to 10 ft below ground surface (bgs), then hydrated bentonite chips 10 ft bgs to ground surface.	
	DATE: 011 AUG 1 2024 PM 1:40 PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:	

6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING	
	Scott Scarborough Digitally signed by Scott Scarborough Date: 2024.07.30 10:43:42 -06'00'	SIGNATURE OF DRILLER / PRINT SIGNEE NAME DATE

FOR USE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/2019)

FILE NO. C-4856-POD 1	POD NO. 1	TRN NO. 763064
LOCATION Mon 26.34.23.232	WELL TAG ID NO.	PAGE 2 OF 2



State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 763064
File Nbr: C 04856
Well File Nbr: C 04856 POD1

Aug. 01, 2024

ASHLEY GIOVENGO
ENSOLUM, LLC
3122 NATIONAL PARKS HIGHWAY
CARLSBAD, NM 88220

Greetings:

The above numbered permit was issued in your name on 07/11/2024.

The Well Record was received in this office on 08/01/2024, stating that it had been completed on 07/25/2024, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 07/11/2025.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Maret Thompson".

Maret Thompson
(575) 622-6521

drywell

State Engineer



Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 763064
File Nbr: C 04856
Well File Nbr: C 04856 POD1

Aug. 01, 2024

DALE WOODALL
DEVON ENERGY PRODUCTION COMPANY
205 E. BENDER RD. #150
HOBBS, NM 88240

Greetings:

The above numbered permit was issued in your name on 07/11/2024.

The Well Record was received in this office on 08/01/2024, stating that it had been completed on 07/25/2024, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 07/11/2025.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Maret Thompson".

Maret Thompson
(575) 622-6521

drywell



Muskie 23 CTB 5
Nearest Significant Watercourse: Riverine
Distance: 0.90 miles



July 1, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

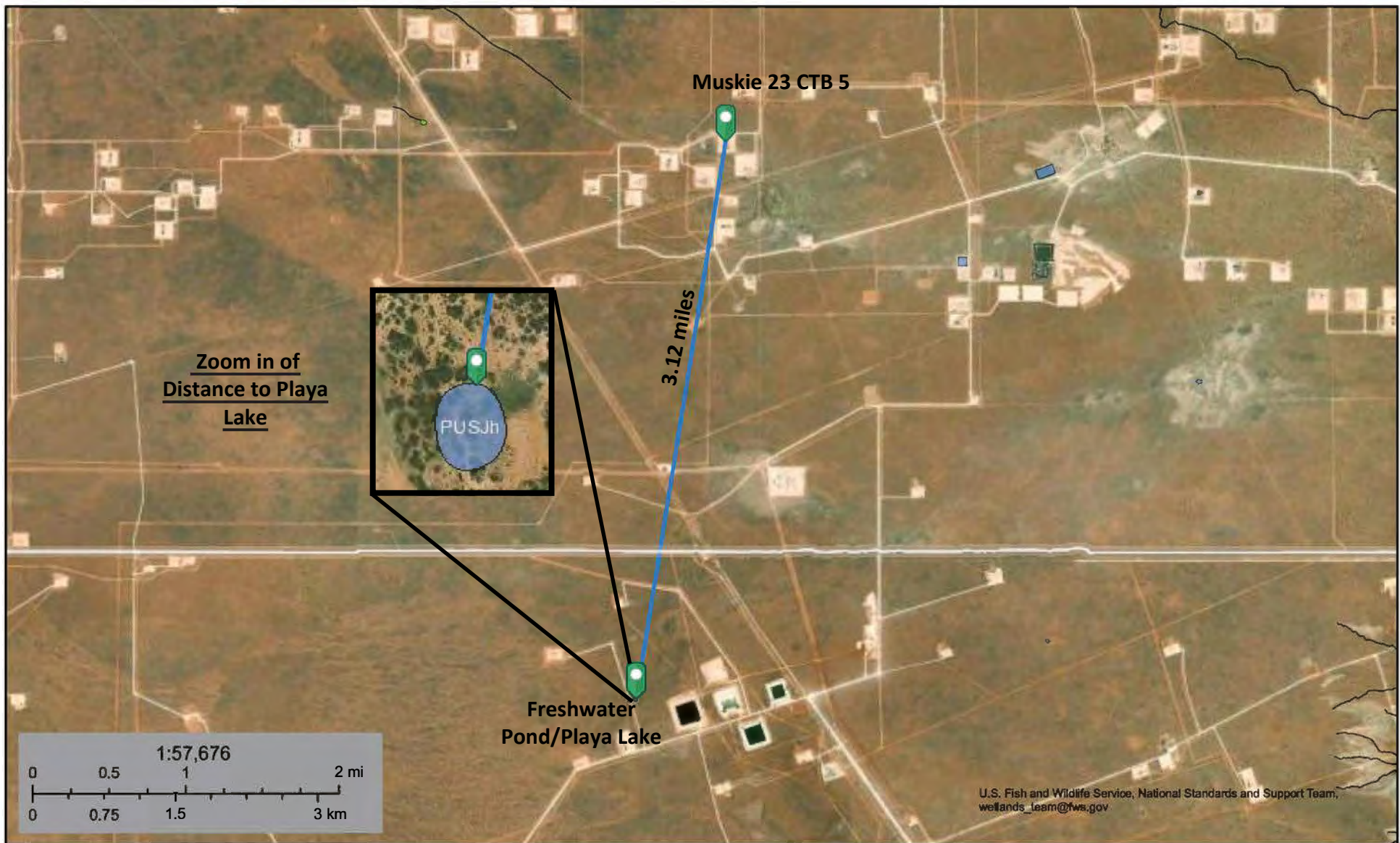
- Lake
- Other
- Riverine

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.



Muskie 23 CTB 5 Nearest Playa Lake Map

Distance: 3.12 miles



July 1, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond





- Lake
- Other
- Riverine

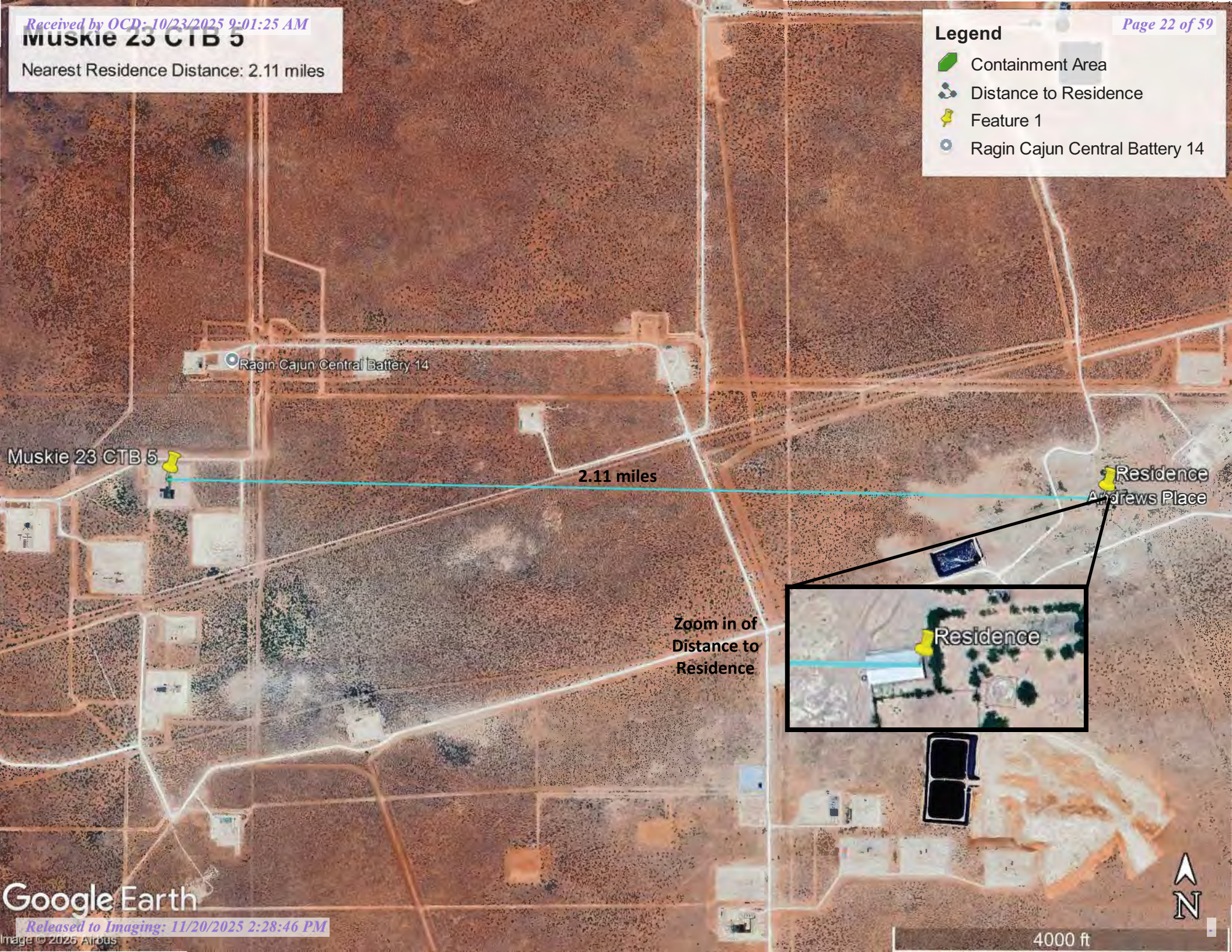
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Muskie 23 CTB 5

Nearest Residence Distance: 2.11 miles

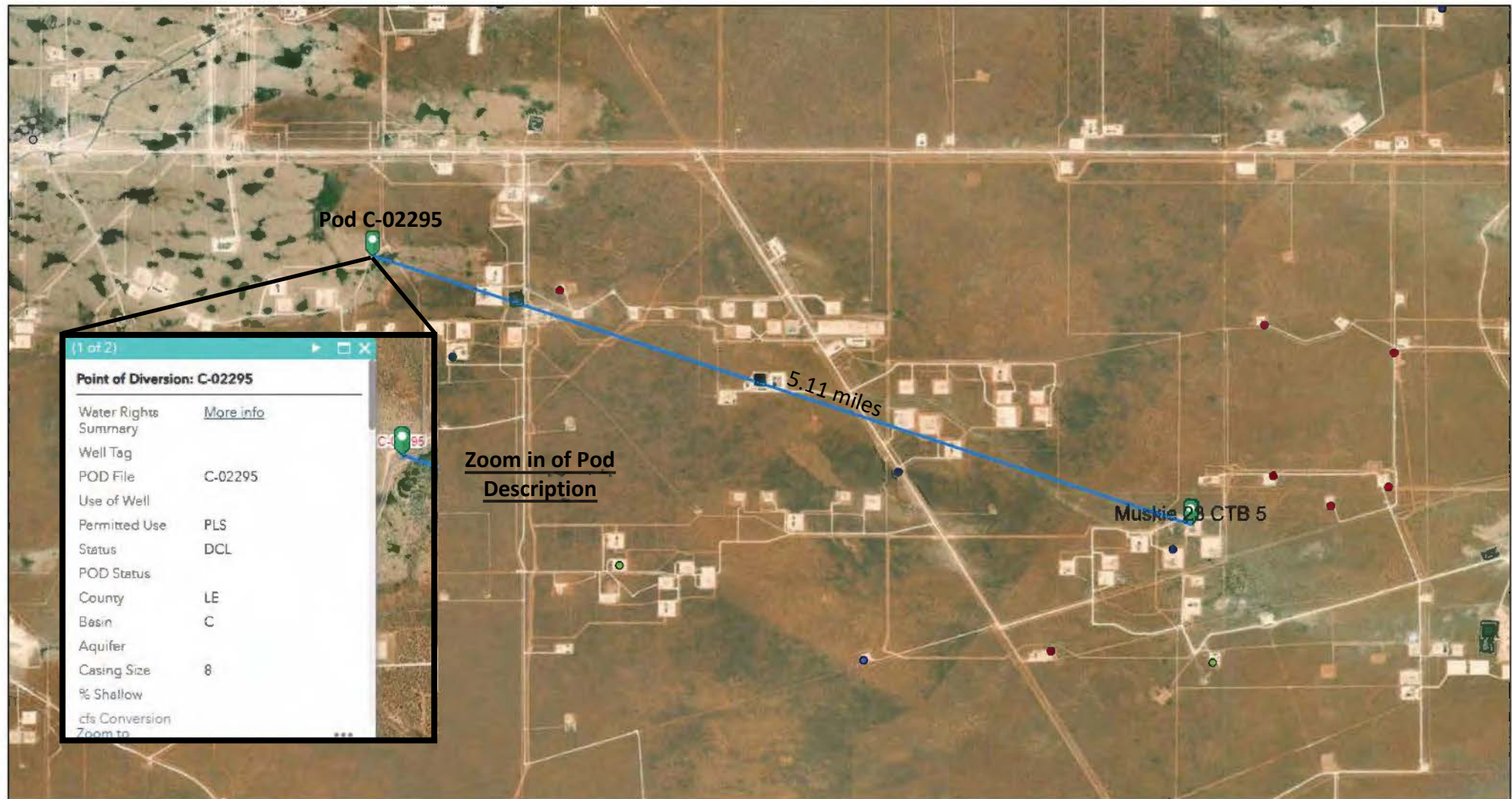
Legend

-  Containment Area
-  Distance to Residence
-  Feature 1
-  Ragin Cajun Central Battery 14



Google Earth

Muskie 23 CTB 5 - Domestic Well Proximity Map



7/4/2025, 6:55:48 AM

— Override 1

GIS WATERS PODs

● Active

○ Pending

● Plugged

□ OSE District Boundary

Nearest Domestic Well

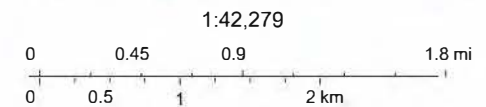
OSE Pod C-02295

Well Type

Livestock Watering

Distance

5.11 miles






Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Maxar

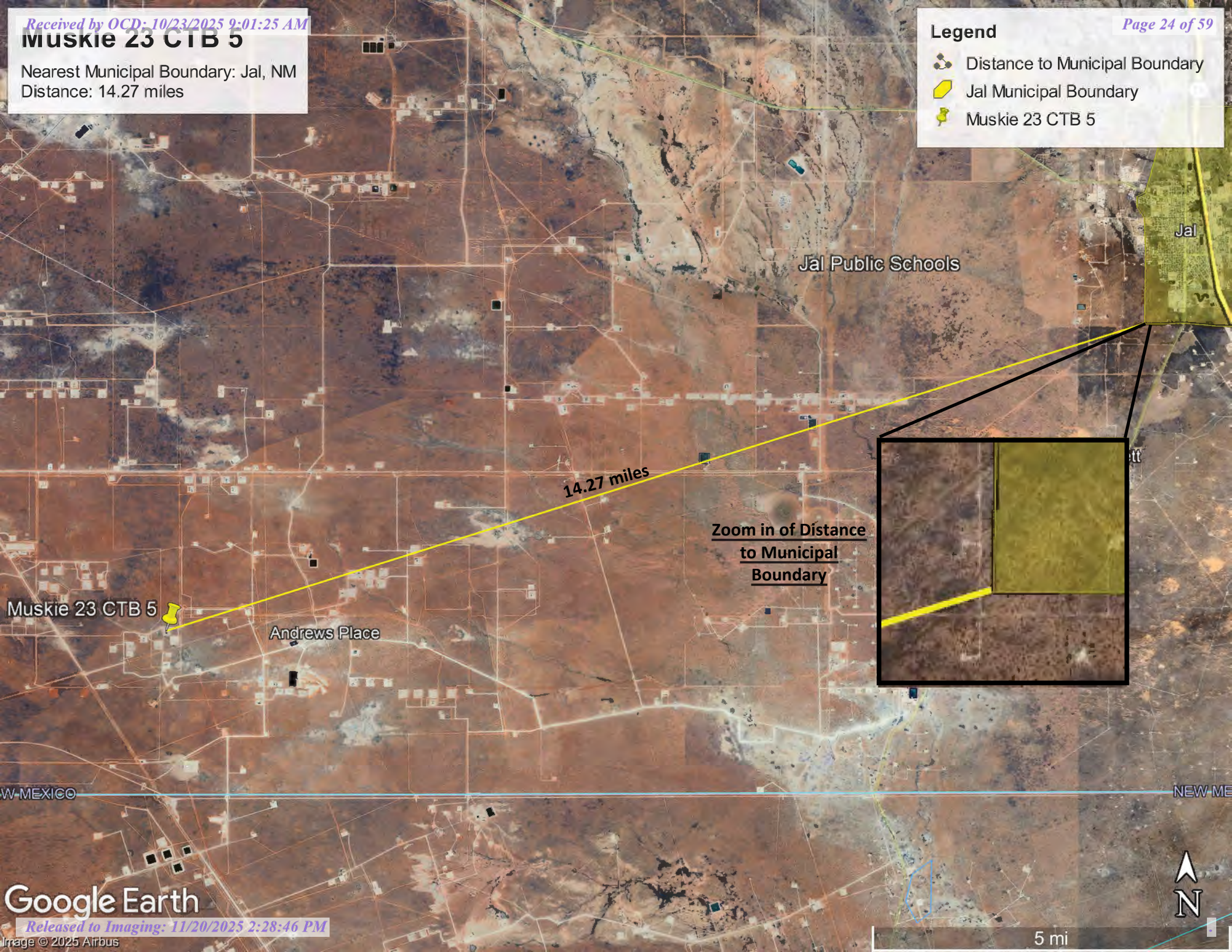
Monica Peppin
This is an unofficial map from the OSE's online application.

Muskie 23 CTB 5

Nearest Municipal Boundary: Jal, NM
Distance: 14.27 miles

Legend

-  Distance to Municipal Boundary
-  Jal Municipal Boundary
-  Muskie 23 CTB 5



Zoom in of Distance
to Municipal
Boundary

Muskie 23 CTB 5

Andrews Place

Jal Public Schools

Jal

W-MEXICO

NEW ME

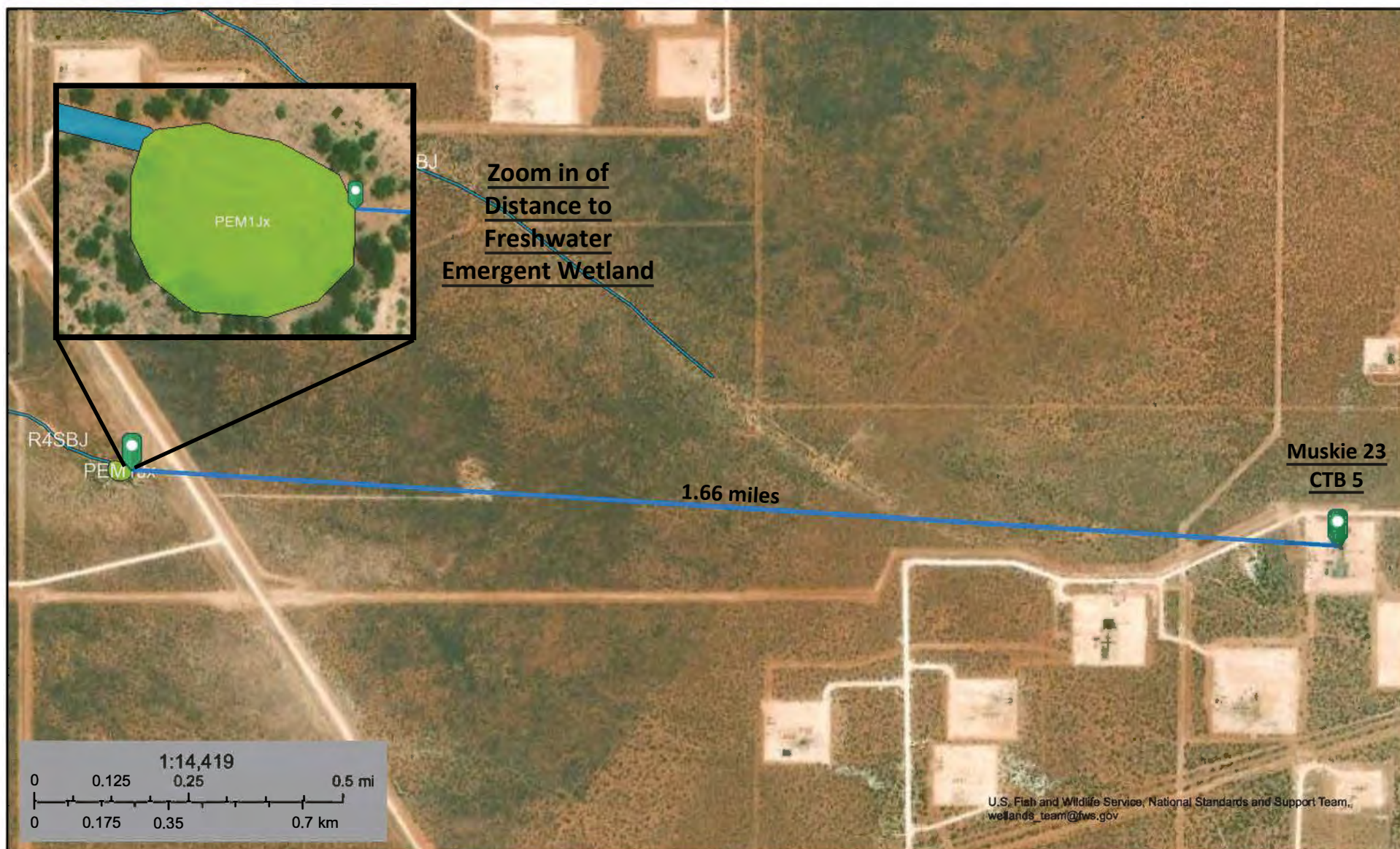
Google Earth

5 mi





Nearest Wetlands: Freshwater Emergent Wetland
Distance: 1.66 miles



July 1, 2025

Wetlands

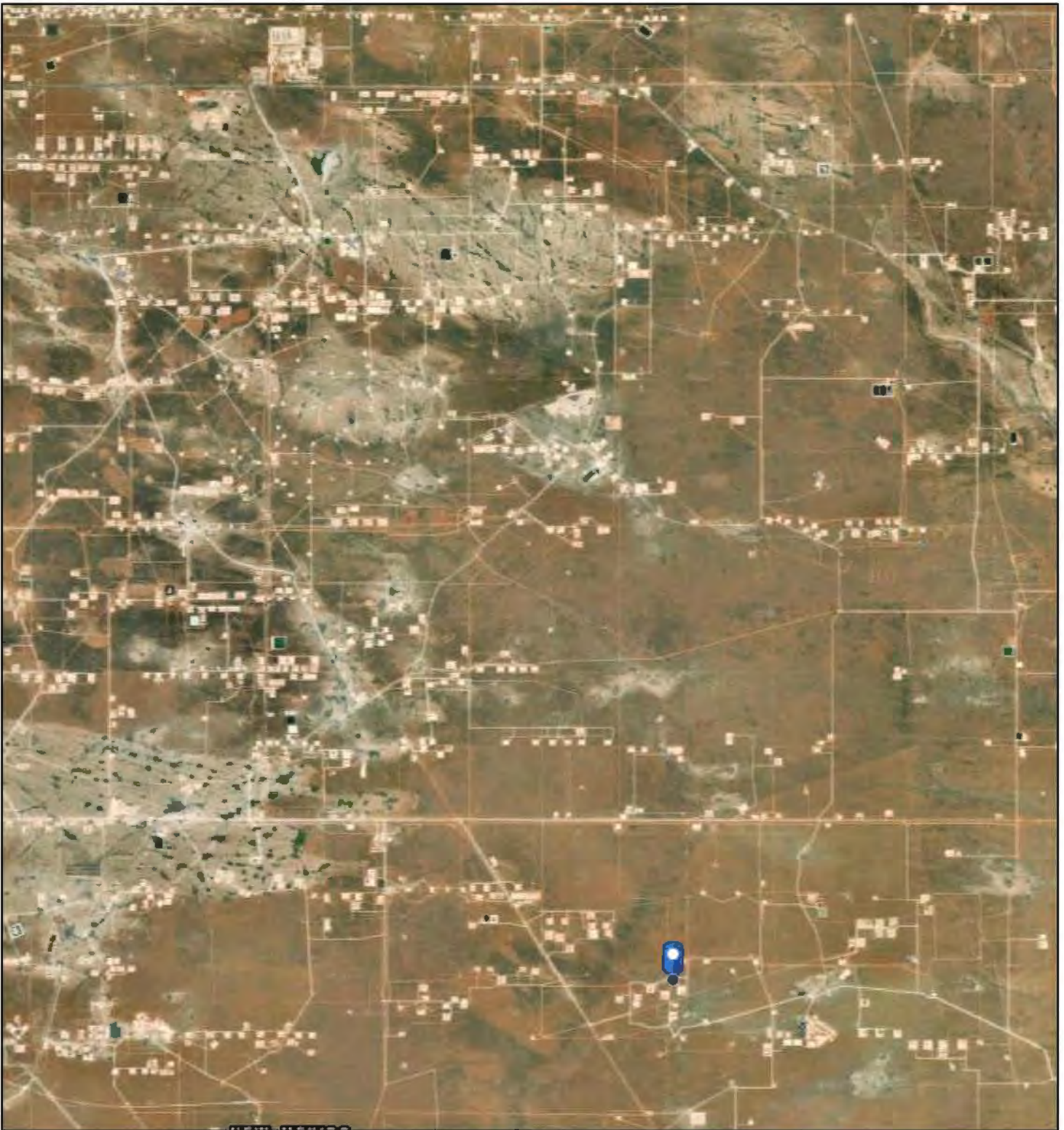
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- 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.

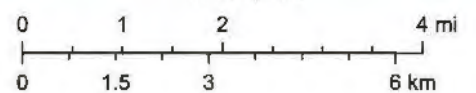
Muskie 23 CTB 5 - Mines Proximity



7/17/2025, 10:20:56 AM

1:144,448

Registered Mines



- ✕ Aggregate, Stone etc.
- ✕ Aggregate, Stone etc.

Esri, HERE, Garmin, Earthstar Geographics

Medium Karst
Area

4.97 miles

Muskie 23
CTB 5

Muskie 23 CTB 5 - Karst Potential & Distance Map

0 0.2 0.4 0.8
mi



New Mexico State Land Office

Disclaimer:

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Released to Imaging: 11/20/2025 2:28:46 PM
Map Created: 7/16/2025

● User drawn points

Karst_Potential_NM

Potential

Critical

High

Medium

Karst Potential

None

Nearest Karst Feature

Medium Karst

Distance

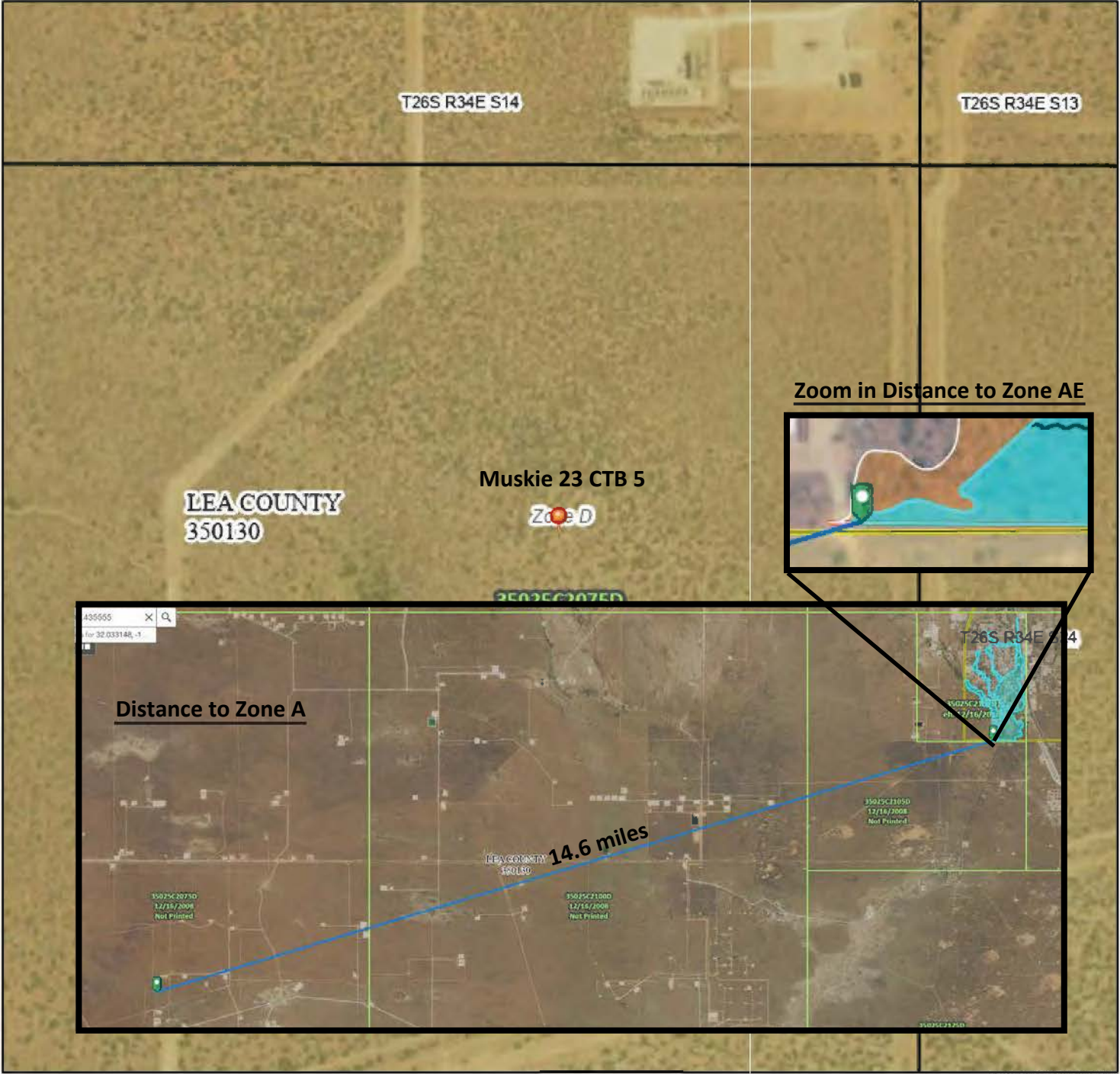
4.97 miles



National Flood Hazard Layer FIRMette



103°26'27"W 32°2'15"N

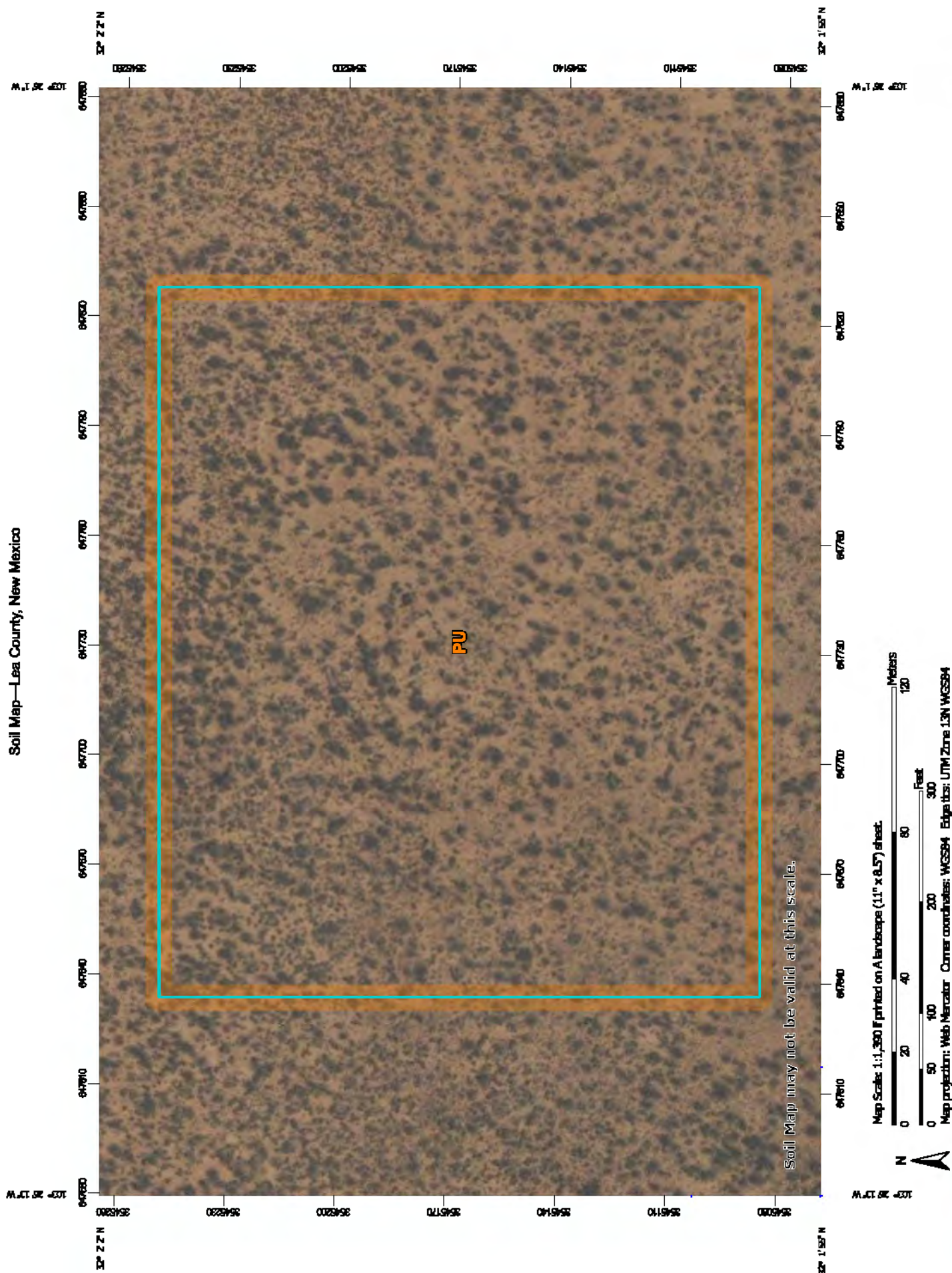


Legend

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

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

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



MAP LEGEND

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

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

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

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

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.

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

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PU	Pyote and Maljamar fine sands	7.9	100.0%
Totals for Area of Interest		7.9	100.0%

Map Unit Description: Pyote and Maljamar fine sands—Lea County, New Mexico

Lea County, New Mexico

PU—Pyote and Maljamar fine sands

Map Unit Setting

National map unit symbol: dmqq

Elevation: 3,000 to 3,900 feet

Mean annual precipitation: 10 to 12 inches

Mean annual air temperature: 60 to 62 degrees F

Frost-free period: 190 to 205 days

Farmland classification: Not prime farmland

Map Unit Composition

Pyote and similar soils: 46 percent

Maljamar and similar soils: 44 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pyote

Setting

Landform: Plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 30 inches: fine sand

Bt - 30 to 60 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: Negligible

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: 5 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Map Unit Description: Pyote and Maljamar fine sands—Lea County, New Mexico

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

Description of Maljamar

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 24 inches: fine sand
Bt - 24 to 50 inches: sandy clay loam
Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 10 percent
Ecological site: R070BC022NM - Sandhills

Map Unit Description: Pyote and Maljamar fine sands—Lea County, New Mexico

Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 21, Sep 3, 2024



Ecological site R070BD003NM

Loamy Sand

Accessed: 07/04/2025

General information

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

Figure 1. Mapped extent

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

Associated sites

R070BD004NM	Sandy Sandy
R070BD005NM	Deep Sand Deep Sand

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

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

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

Table 2. Representative physiographic features

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

Climatic features

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

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

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

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

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

Table 3. Representative climatic features

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

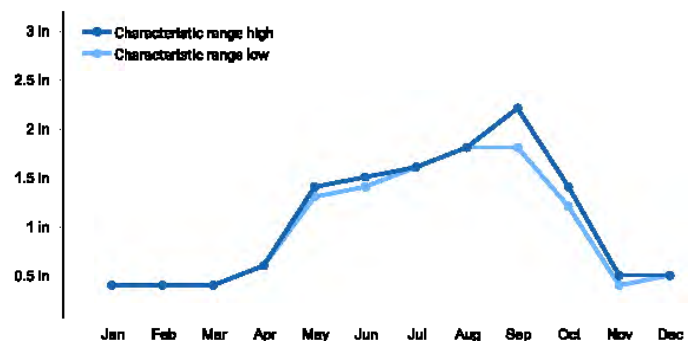


Figure 2. Monthly precipitation range

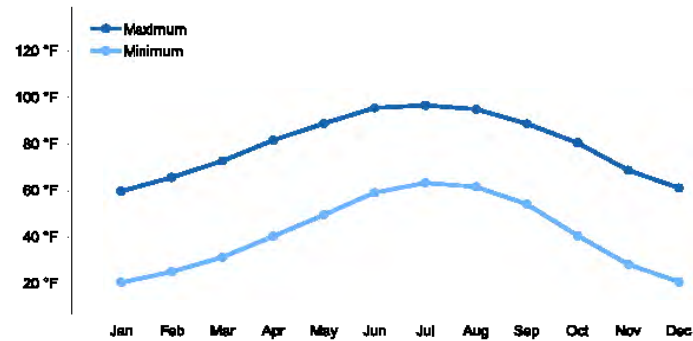


Figure 3. Monthly average minimum and maximum temperature

Influencing water features

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

Soil features

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

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

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

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

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

Characteristic soils are:

- Maljamar
- Berino
- Parjarito
- Palomas
- Wink
- Pyote

Table 4. Representative soil features

Surface texture	(1) Fine sand (2) Fine sandy loam (3) Loamy fine sand
Family particle size	(1) Sandy

Ecological dynamics

Overview

The Loamy Sand site intergrades with the Deep Sand and Sandy

Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to moderately rapid
Soil depth	40–72 in
Surface fragment cover <=3"	10%
Surface fragment cover >3"	Not specified
Available water capacity (0–40in)	5–7 in
Calcium carbonate equivalent (0–40in)	3–40%
Electrical conductivity (0–40in)	2–4 mmhos/cm
Sodium adsorption ratio (0–40in)	2
Soil reaction (1:1 water) (0–40in)	6.6–8.4
Subsurface fragment volume <=3" (Depth not specified)	4–12%
Subsurface fragment volume >3" (Depth not specified)	Not specified

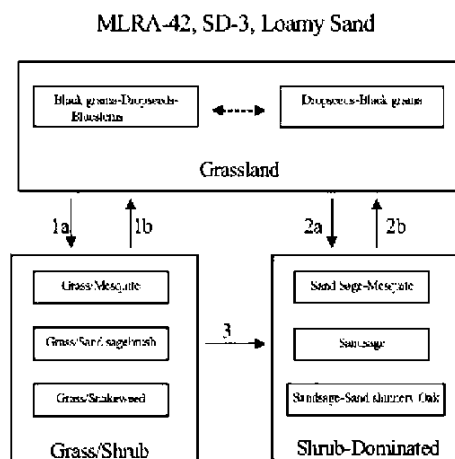
sites (SD-3). These sites can be differentiated by surface soil texture and depth to a textural change. Loamy Sand and Deep Sand sites have coarse textured (sands and loamy sand) surface soils while Sandy sites have moderately coarse textured (sandy loam and fine sandy loam) surfaces. Although Loamy Sand and

Deep Sand sites have similar surface textures, the depth to a textural change is different—Loamy Sand sub-surface textures typically increase in clay at approximately 20 to 30 inches, and Deep Sand sites not until around 40 inches.

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

State and transition model

Plant Communities and Transitional Pathways (diagram):



1a Drought, over grazing, fire suppression.

1b Brush control, prescribed grazing.

2a Severe loss of grass cover, fire suppression, erosion.

2b Brush control, seeding, prescribed grazing.

3. Continued loss of grass cover, erosion.

State 1 Historic Climax Plant Community

Community 1.1 Historic Climax Plant Community

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

Table 5. Annual production by plant type

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

Table 6. Ground cover

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

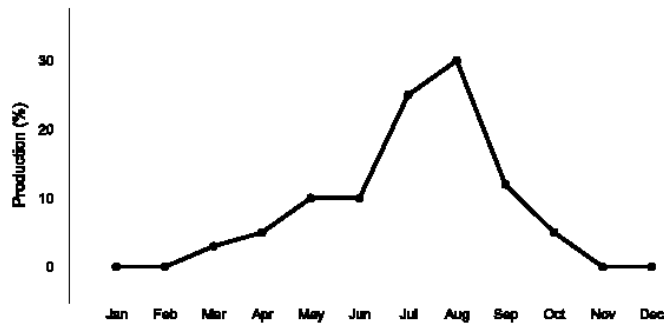


Figure 5. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC. SD-3 Loamy Sand - Warm season plant community.

Stata 2 Grass/Shrub

Community 2.1 Grass/Shrub



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

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

State 3 Shrub Dominated

Community 3.1 Shrub Dominated

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

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass/Grasslike					
1	Warm Season			61–123	
	little bluestem	SCSC	<i>Schizachyrium scoparium</i>	61–123	—
2	Warm Season			37–61	
	sand bluestem	ANHA	<i>Andropogon hallii</i>	37–61	—
3	Warm Season			37–61	
	cane bluestem	BOBA3	<i>Bothriochloa barbinodis</i>	37–61	—
	silver bluestem	BOSA	<i>Bothriochloa saccharoides</i>	37–61	—
4	Warm Season			123–184	
	black grama	BOER4	<i>Bouteloua eriopoda</i>	123–184	—
	bush muhly	MUPO2	<i>Muhlenbergia porteri</i>	123–184	—
5	Warm Season			123–184	
	thin paspalum	PASE5	<i>Paspalum setaceum</i>	123–184	—
	plains bristlegass	SEVU2	<i>Setaria vulpiseta</i>	123–184	—
	fringed signalgrass	URCI	<i>Urochloa ciliatissima</i>	123–184	—
6	Warm Season			123–184	
	spike dropseed	SPCO4	<i>Sporobolus contractus</i>	123–184	—
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	123–184	—
	mesa dropseed	SPFL2	<i>Sporobolus flexuosus</i>	123–184	—
7	Warm Season			61–123	
	hooded windmill grass	CHCU2	<i>Chloris cucullata</i>	61–123	—
	Arizona cottontop	DICA8	<i>Digitaria californica</i>	61–123	—
9	Other Perennial Grasses			37–61	
	Grass, perennial	2GP	<i>Grass, perennial</i>	37–61	—
Shrub/Vine					
8	Warm Season			37–61	
	New Mexico feathergrass	HENE5	<i>Hesperostipa neomexicana</i>	37–61	—
	giant dropseed	SPGI	<i>Sporobolus giganteus</i>	37–61	—
10	Shrub			61–123	
	sand sagebrush	ARFI2	<i>Artemisia filifolia</i>	61–123	—
	Havard oak	QUHA3	<i>Quercus havardii</i>	61–123	—
11	Shrub			34–61	
	fourwing saltbush	ATCA2	<i>Atriplex canescens</i>	37–61	—
	featherplume	DAFO	<i>Dalea formosa</i>	37–61	—
12	Shrub			37–61	
	jointfir	EPHED	<i>Ephedra</i>	37–61	—
	littleleaf ratany	KRER	<i>Krameria erecta</i>	37–61	—
13	Other Shrubs			37–61	
	Shrub (>.5m)	2SHRUB	<i>Shrub (>.5m)</i>	37–61	—
Forb					
14	Forb			61–123	
	leatherweed	CRPOP	<i>Croton pottsii</i> var. <i>pottsii</i>	61–123	—
	Indian blanket	GAPU	<i>Gaillardia pulchella</i>	61–123	—

	globemallow	SPHAE	<i>Sphaeralcea</i>	61–123	–
15	Forb			12–37	
	woolly groundsel	PACA15	<i>Packera cana</i>	12–37	–
16	Forb			61–123	
	touristplant	DIWI2	<i>Dimorphocarpa wislizeni</i>	61–123	–
	woolly plantain	PLPA2	<i>Plantago patagonica</i>	61–123	–
17	Other Forbs			37–61	
	Forb (herbaceous, not grass nor grass-like)	2FORB	<i>Forb (herbaceous, not grass nor grass-like)</i>	37–61	–

Animal community

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

Hydrological functions

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

Hydrologic Interpretations

Soil Series Hydrologic Group

Berino B

Kinco A

Maljamar B

Pajarito B

Palomas B

Wink B

Pyote A

Recreational uses

This site offers recreation potential for hiking, borseback riding, nature observation, photography and hunting. During years of

abundant spring moisture, this site displays a colorful array of wildflowers during May and June.

Wood products

This site has no potential for wood products.

Other products

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

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM

100 - 76 2.3 – 3.5

75 – 51 3.0 – 4.5

50 – 26 4.6 – 9.0


25 – 0 9.1 +


Muskie 23 CTB 5

Geological Formation - Qe/Qp
Description - Intermixed sands with local peat deposits. Quaternary Eolian Sand with Local Peat
Fine to medium wind-blown sands forming stabilized sheets and ridges. Local peat (Qp) occurs in depressions with poor drainage. Represents aeolian and intermittent wetland deposition on piedmont slopes.

Legend

Page 41 of 59

 Muskie 23 CTB 5

 Qe/Qp

Qe/Qp

Name	Qe/Qp
AREA	0.730
PERIMETER	24.975
NMMAPDD83_	7901
NMMAPDD831	9561
P1	194
HP	3

Geological
Formation
Data

Muskie 23 CTB 5



APPENDIX C

CORRESPONDENCE



Outlook

RE: [EXTERNAL] nAPP2513262998 Muskie 23 CTB 5 Liner Inspection Notification**From** Raley, Jim <Jim.Raley@dvn.com>**Date** Mon 2025-06-16 7:27 AM**To** Monica Peppin <Monica.Peppin@kljeng.com>**Cc** Will Harmon <will.harmon@kljeng.com>

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Submitted 6/16

Jim Raley | Environmental Professional - Permian Basin

5315 Buena Vista Dr., Carlsbad, NM 88220

C: (575)689-7597 | jim.rale@dvn.com**From:** Monica Peppin <Monica.Peppin@kljeng.com>**Sent:** Friday, June 13, 2025 4:02 PM**To:** Raley, Jim <Jim.Raley@dvn.com>**Cc:** Will Harmon <will.harmon@kljeng.com>**Subject:** [EXTERNAL] nAPP2513262998 Muskie 23 CTB 5 Liner Inspection Notification

Jim,

Please see the liner inspection notice below for the Muskie 23-5. If we need to adjust the time and date just let me know.

Liner Inspection Notification	
Site Name	Muskie 23 CTB 5
Incident ID	nAPP2513262998
Containment Surface Area (Square Feet)	4468
All impacted materials have been removed from liner?	Yes
Liner Inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	6/18/2025
Inspection Time	10:00 AM

Contact info of technician for observers	Monica Peppin 575.909.3418
Navigation to site (Lat/Long)	32.033148, -103.435555

Thank you,
MP

Monica Peppin, A.S.
Environmental Specialist II



575-213-9010 Direct

575-909-3418 Cell

Carlsbad, NM 88220

kljeng.com



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Outlook

Liner

From Raley, Jim <Jim.Raley@dvn.com>

Date Wed 2025-06-18 2:55 PM

To Enviro, OCD, EMNRD <ocd.enviro@emnrd.nm.gov>

Cc Monica Peppin <Monica.Peppin@kljeng.com>

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NMOCD,

Personal was unable to make this liner inspection Application ID: 475152 for incident nAPP2513262998 . Devon will reschedule the inspection in the near future and submit 48 hour notification.

Jim Raley | Environmental Professional - Permian Basin

5315 Buena Vista Dr., Carlsbad, NM 88220

C: (575)689-7597 | jim.rale@dvn.com



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>

Sent: Monday, June 16, 2025 7:27 AM

To: Raley, Jim <Jim.Raley@dvn.com>

Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 475152

To whom it may concern (c/o James Raley for DEVON ENERGY PRODUCTION COMPANY, LP),

The OCD has received the submitted *Notification for Liner Inspection for a Release* (C-141L), for incident ID (n#) nAPP2513262998.

The liner inspection is expected to take place:

When: 06/18/2025 @ 10:00

Where: A-23-26S-34E 1145 FNL 1012 FEL (32.03314,-103.43566)

Additional Information: Monica Peppin 575.909.3418

Additional Instructions: 32.033148, -103.435555

An OCD representative may be available onsite at the date and time reported. In the absence or

presence of an OCD representative, liner inspection pursuant to 19.15.29.11.A(5)(a) NMAC is required. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505

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Outlook

RE: [EXTERNAL] Re: Liner Muskie 23 CTB 5 nAPP2513262998

From Raley, Jim <Jim.Raley@dvn.com>**Date** Thu 2025-06-26 10:07 AM**To** Monica Peppin <Monica.Peppin@kljeng.com>**Cc** Will Harmon <will.harmon@kljeng.com>**Submitted 6/26**

Jim Raley | Environmental Professional - Permian Basin

5315 Buena Vista Dr., Carlsbad, NM 88220

C: (575)689-7597 | jim.rale@dn.com**From:** Monica Peppin <Monica.Peppin@kljeng.com>**Sent:** Thursday, June 26, 2025 9:11 AM**To:** Raley, Jim <Jim.Raley@dn.com>**Cc:** Will Harmon <will.harmon@kljeng.com>**Subject:** [EXTERNAL] Re: Liner Muskie 23 CTB 5 nAPP2513262998

Jim,

Here is the updated scheduled date for the Muskie liner inspection.

Liner Inspection Notification	
Site Name	Muskie 23 CTB 5
Incident ID	nAPP2513262998
Containment Surface Area (Square Feet)	4468
All impacted materials have been removed from liner?	Yes
Liner Inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	6/30/2025
Inspection Time	10:00 AM
Contact info of technician for observers	Monica Peppin 575.909.3418
Navigation to site (Lat/Long)	32.033148, -103.435555

Let me know if you have any questions.

MP

From: Raley, Jim <jim.Raley@dvn.com>
Sent: Wednesday, June 18, 2025 2:55 PM
To: Enviro, OCD, EMNRD <ocd.enviro@emnrd.nm.gov>
Cc: Monica Peppin <Monica.Peppin@kljeng.com>
Subject: Liner

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

NMOCD,

Personal was unable to make this liner inspection Application ID: 475152 for incident nAPP2513262998 . Devon will reschedule the inspection in the near future and submit 48 hour notification.

Jim Raley | Environmental Professional - Permian Basin

5315 Buena Vista Dr., Carlsbad, NM 88220

C: (575)689-7597 | jim.ralej@dvn.com



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, June 16, 2025 7:27 AM
To: Raley, Jim <Jim.Raley@dvn.com>
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 475152

To whom it may concern (c/o James Raley for DEVON ENERGY PRODUCTION COMPANY, LP),

The OCD has received the submitted *Notification for Liner Inspection for a Release* (C-141L), for incident ID (n#) nAPP2513262998.

The liner inspection is expected to take place:

When: 06/18/2025 @ 10:00

Where: A-23-26S-34E 1145 FNL 1012 FEL (32.03314,-103.43566)

Additional Information: Monica Peppin 575.909.3418

Additional Instructions: 32.033148, -103.435555

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, liner inspection pursuant to 19.15.29.11.A(5)(a) NMAC is required. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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Outlook

RE: [EXTERNAL] nAPP2513262998/nAPP2518939990 Muskie 23 CTB 5 Liner Inspection Notification**From** Raley, Jim <Jim.Raley@dvn.com>**Date** Thu 2025-08-07 1:27 PM**To** Monica Peppin <Monica.Peppin@kljeng.com>

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Resubmitted both for 8/11/2025 at 10 AM

Jim Raley | Environmental Professional - Permian Basin

5315 Buena Vista Dr., Carlsbad, NM 88220

C: (575)689-7597 | jim.rale@dvn.com**From:** Monica Peppin <Monica.Peppin@kljeng.com>**Sent:** Monday, July 21, 2025 6:00 AM**To:** Raley, Jim <Jim.Raley@dvn.com>**Cc:** Will Harmon <will.harmon@kljeng.com>; Bob Raup <Bob.Raup@kljeng.com>**Subject:** [EXTERNAL] nAPP2513262998/nAPP2518939990 Muskie 23 CTB 5 Liner Inspection Notification

Jim,

Here is the liner notice for Muskie 23-5. I put both incidents on here as we discussed. Let me know if you need me to update the time and date.

Liner Inspection Notification	
Site Name	Muskie 23 CTB 5
Incident ID	nAPP2513262998 nAPP2518939990
Containment Surface Area (Square Feet)	4468
All impacted materials have been removed from liner?	Yes
Liner Inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	7/23/2025
Inspection Time	11:30 AM

Contact info of technician for observers	Monica Peppin 575.909.3418
Navigation to site (Lat/Long)	32.033148, -103.435555

Thanks,
Monica

Monica Peppin, A.S.
Environmental Specialist II



575-213-9010 **Direct**

575-909-3418 **Cell**

Carlsbad, NM 88220

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Outlook

(Extension Approval) - nAPP2513262998 Muskie 23 CTB 5

From Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>

Date Fri 2025-08-08 7:38 AM

To Monica Peppin <Monica.Peppin@kljeng.com>

Cc Will Harmon <will.harmon@kljeng.com>; Raley, Jim <jim.raley@dvn.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

You don't often get email from robert.hamlet@emnrd.nm.gov. [Learn why this is important](#)

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Monica,

OCD Permitting defaults to a 90-day extension for a Remediation Closure Report extension request. Please have a Remediation Closure Report uploaded to the OCD Permitting Portal no later than **November 6th, 2025**. Please include this e-mail correspondence in the Remediation Closure Report.

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau

EMNRD - Oil Conservation Division

506 W. Texas Ave. | Artesia, NM 88210

575.909.0302 | robert.hamlet@emnrd.nm.gov

<http://www.emnrd.state.nm.us/OCD/>



From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Sent: Thursday, August 7, 2025 2:21 PM

To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>

Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Subject: FW: [EXTERNAL] nAPP2513262998 Muskie 23 CTB 5 Extension Request

From: Monica Peppin <Monica.Peppin@kljeng.com>

Sent: Thursday, August 7, 2025 2:19 PM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>

Cc: Will Harmon <will.harmon@kljeng.com>; Raley, Jim <jim.raley@dvn.com>

Subject: [EXTERNAL] nAPP2513262998 Muskie 23 CTB 5 Extension Request

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To whom it may concern:

On behalf of Devon Energy, KLJ respectfully requests a 30-day extension for the incident associated with Incident ID nAPP2513262998, initially reported on May 11, 2025.

Due to site-specific factors and internal coordination, the liner inspection has been rescheduled and official notification was submitted on August 7, 2025. The inspection is now scheduled to occur on August 11, 2025, at 10:00 AM. The requested extension will allow adequate time to complete the inspection, evaluate findings, and finalize the closure documentation in accordance with applicable regulatory requirements.

We appreciate your time and consideration of this request. Please let us know if any additional information is needed.

Thank you,

Monica

Monica Peppin, A.S.
Environmental Specialist II



575-213-9010 Direct

575-909-3418 Cell

Carlsbad, NM 88220

kljeng.com



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

QUESTIONS

Action 519247

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 519247
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2513262998
Incident Name	NAPP2513262998 MUSKIE 23 CTB 5 @ FAPP2317134046
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2317134046] MUSKIE 23 CTB 5

Location of Release Source

Please answer all the questions in this group.

Site Name	MUSKIE 23 CTB 5
Date Release Discovered	05/11/2025
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.

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

Nature and Volume of Release

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

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Flow Line - Production Produced Water Released: 360 BBL Recovered: 360 BBL Lost: 0 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)	Pinhole leak on welded T allowed release of fluids to lined secondary containment. Fluids fully recovered.

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
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QUESTIONS, Page 2

Action 519247

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 519247
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	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: James Raley Title: EHS Professional Email: jim.raley@dvsn.com Date: 10/23/2025
--	---

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

General Information
Phone: (505) 629-6116

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

QUESTIONS, Page 3

Action 519247

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 519247
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	08/01/2025
On what date will (or did) the final sampling or liner inspection occur	08/11/2025
On what date will (or was) the remediation complete(d)	08/11/2025
What is the estimated surface area (in square feet) that will be remediated	4468
What is the estimated volume (in cubic yards) that will be remediated	0
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 4

Action 519247

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 519247
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
Is (or was) there affected material present needing to be removed	Yes
Is (or was) there a power wash of the lined containment area (to be) performed	Yes
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dv.com Date: 10/23/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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
Oil Conservation Division
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Santa Fe, NM 87505

QUESTIONS, Page 6

Action 519247

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 519247
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Liner Inspection Information	
Last liner inspection notification (C-141L) recorded	493358
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	08/11/2025
Was all the impacted materials removed from the liner	Yes
What was the liner inspection surface area in square feet	4468

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
What was the total surface area (in square feet) remediated	4468
What was the total volume (cubic yards) remediated	0
Summarize any additional remediation activities not included by answers (above)	Liner Inspected

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

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dmv.com Date: 10/23/2025
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Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 519247

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 519247
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2513262998 MUSKIE 23 CTB 5, thank you. This Remediation Closure Report is approved.	11/20/2025