February 3, 2026

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

SUBJECT: Liner Inspection and Closure Report for North Thistle 3 CTB 1– January 9, 2026 Site Visit

Incident ID: nAPP2528041022/nAPP2532836691/nAPP2533532699
Facility ID (Name): fAPP2130622273 (NORTH THISTLE 3 CTB 1)
Facility Location: Unit P of Section 3, Township 23 South, Range 33 East, New Mexico
Facility GPS Coordinates: 32.329904, -103.553590
Lea County, New Mexico

Introduction

KLJ Engineering (KLJ) has prepared this report on behalf of Devon Energy Production Company, LP (Devon), to document liner inspection activities conducted at the North Thistle 3 CTB 1 facility (Site) on January 9, 2026, following produced water releases that occurred on October 3, 2025 (Incident ID nAPP2528041022), November 22, 2025 (Incident ID nAPP2532836691), and November 25, 2025 (Incident ID nAPP2533532699).

Site Information and Background

The Site is located approximately 20.22 miles southwest of Eunice, New Mexico, on New Mexico State Land Office (NMSLO) property. The Site lies within Unit P, Section 3, Township 23 South, Range 33 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 Description and Immediate Response

INCIDENT ID NAPP2528041022

On October 3, 2025, a Devon lease operator identified a pinhole leak on the commissioning line within the lined secondary containment at the Site. The release consisted of 12 barrels (bbls) of produced water and was fully contained within the lined secondary containment system with a total of 12 bbls recovered. Immediate response actions included source control, recovery of free liquids, and photographic documentation.

INCIDENT ID NAPP2532836691

On November 22, 2025, a second produced water release occurred within the lined secondary containment due to a failed connection within the secondary lined containment. A total of 50 bbls of produced water were released inside the secondary containment. All released fluids were recovered, and no migration beyond the containment liner was observed. Enhanced notification procedures were undertaken due to the release exceeding 25 barrels, which meets the criteria for a major release under 19.15.29.7(A)(1).

INCIDENT ID NAPP2533532699

On November 25, 2025, a third release occurred when a water transfer pump (WTP) developed a leak within the lined secondary containment. A total of approximately 8 barrels (bbls) of produced water were released, with approximately 8 bbls recovered and no loss to the environment observed.

Site Characterization Summary

The Site is underlain by Quaternary eolian deposits and alluvium derived from sandstone. Terrain for the Site and immediate surrounding area includes terraces, piedmonts, dunes fields, or upland plains at elevations ranging from 2,842 to 4,500 feet above mean sea level (amsl). Slopes range from 0 to 15 percent, usually less than 5 percent where low stabilized hummocks or dunes occur, with 8 to 13 inches of average annual precipitation. Soil within the Site tends to be well-drained or excessively drained, with low to moderate water-holding capacity.

The USDA – Web Soil Survey (WSS) identifies the predominant soil type at the Site as Kermit-Palomas fine sands that is deep or very deep. Surface textures are sand loam, fine sand, or loamy fine sand. Underlying material textures are loamy fine sand, fine sand, sand or fine sandy loam. Course textures and rapid drying of the surface may cause the soil to become windblown and form low hummocks or dunes around shrubs.

Vegetation in the proximity of the Site reflects a drought-tolerant grassland community adapted to arid conditions, consisting primarily of native grasses, including giant dropseed, other dropseeds, threeawns, and blustems, with scattered shrubs. Vegetative cover provides surface stabilization and limits erosion potential under typical climatic conditions. However, historical fire suppression may have contributed to increased woody plant abundance, which has reduced grass species. Additionally, drought conditions compounded with excessive grazing likely has driven many grass species out of competition with scrubs and may result in a shinnery oak dominated plant community.

No surface water features were identified within 300 feet of the Site. The nearest significant watercourse (riverine) is located approximately 0.89 miles southwest of the Site, and the nearest playa or wetland feature is located approximately 1.63 miles southeast from the Site. These distances comply with the setback requirements of 19.15.29.12(C)(4) NMAC.

Based on New Mexico Office of the State Engineer (NMOSE) records, the nearest Point of Diversion (POD) C-04767-POD1 is located at the Site and consists of a temporary borehole advanced to a depth of approximately 55 feet below ground surface (bgs), with no groundwater encountered. The nearest domestic well used for stock watering purposes, NMOSE C-03582-POD1, is 1.43 miles southeast of the Site.

The Site is not located within a designated karst potential zone. The nearest potential karst zone, identified as a medium karst zone, is located 14.9 miles to the west. 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 A, is 21 miles to the west.

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 the 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: 51-100 feet bgs			
Site Name	North Thistle 3 CTB 1	Company	Devon Energy Production Company, LP
Facility ID/API Number	fAPP2130622273	ULSTR GPS	P-3-23S-33E 32.329904, -103.553590
Lease ID	V082330001	Land Status	State Land Office
Incident ID	nAPP2528041022 nAPP2532836691 nAPP2533532699	Date Of Release	10/3/2025 11/22/2025 11/25/2025
Source of Release	Pinhole leak on commission line, connection failure, and leak on water transfer pump	Volume Released/Recovered	12 bbls/12 bbls pw 50 bbls/50 bbls pw 8 bbls/8 bbls pw
Specific Features	DTGW: 51-100 ft bgs (no groundwater encountered); POD on Site; No karst potential; No surface water within 300 ft; FEMA Zone D.		

Liner Inspection Activities

KLJ submitted a liner inspection notification to the New Mexico Oil Conservation Division (NMOCD) on November 4, 2025, and conducted an initial site visit on November 7, 2025, to perform the inspection; however, the liner surface contained residual material and was not suitable for inspection at that time. The inspection was deferred, and a follow-up inspection was scheduled to occur after the liner had been cleaned.

Due to multiple releases within the containment and the need for pressure washing prior to inspection, Devon submitted a request for a 60-day extension of the liner inspection deadline to the NMOCD and the NMSLO on December 31, 2025. The extension request was reviewed and subsequently approved by NMOCD and NMSLO on January 5, 2026. Supporting correspondence is provided in **Appendix C**.

Following liner cleaning and receipt of regulatory approval, a second liner inspection notification was submitted to NMOCD and NMSLO on January 7, 2026, and a liner inspection was conducted on January 9, 2026, in accordance with 19.15.29.11(A)(5)(a)(iii) NMAC. The first notification cited an approximate area of 3,456 square feet, that used the area of the release instead of the containment. This figure was subsequently corrected in the second notification and encompassed approximately 12,089 square feet of lined secondary containment. No perforations, tears, or defects were observed that would compromise containment integrity. Field notes and site photographs documenting liner inspection activities and site conditions are included in **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 nAPP2528041022, nAPP2532836691, and nAPP2533532699.

Based on the site assessment and activities conducted, Devon respectfully requests closure of incident nAPP2528041022, nAPP253836691, nAPP2533532699 with a No Further Action (NFA) determination.

Submitted and prepared by:
KLJ Engineering

Written By
Name: Monica Peppin
Title: Environmental Specialist II

Signature: _____

Reviewed By
Name: Will Harmon, P.G.
Title: Environmental Project Manager

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:**	January 9, 2026
Site:	North Thistle 3 CTB 1	**Arrival Time:**	1:48 PM
Coordinates:	32.329904, -103.553590		
Client Contact:	Jim Raley		
Land Status:	State Land Office		
County:	Lea		
Lease ID:	V028180001		
Incident ID's:	nAPP2528041022; nAPP2532836691; nAPP2533532699		

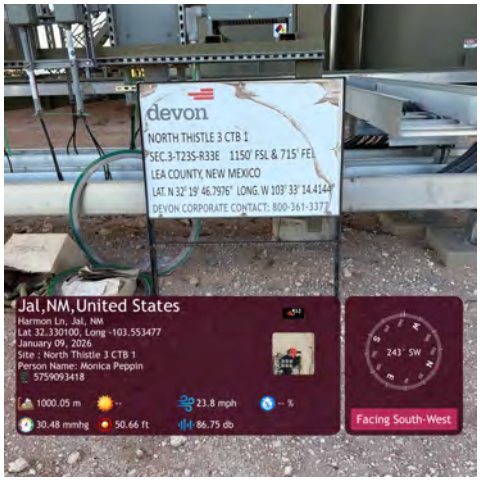
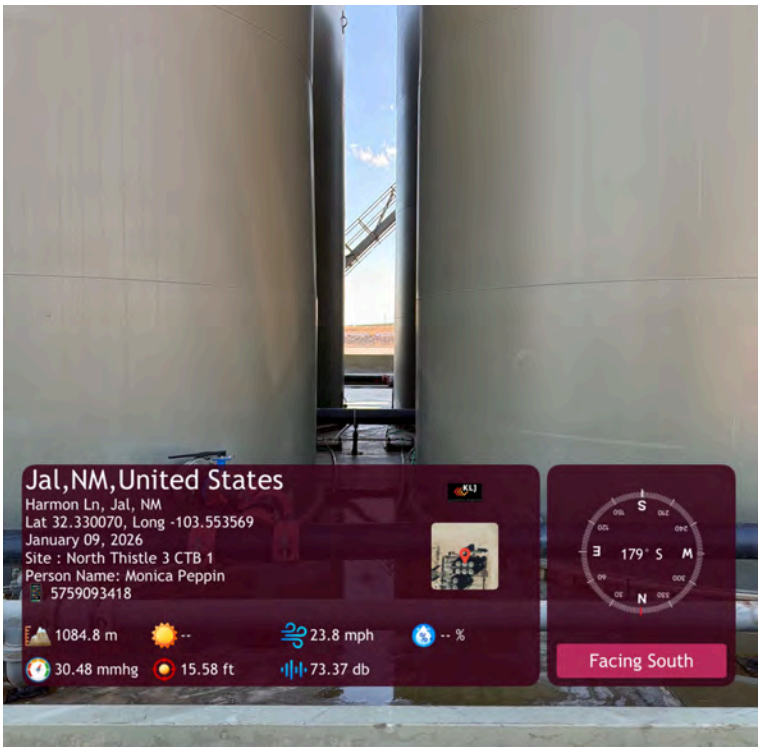


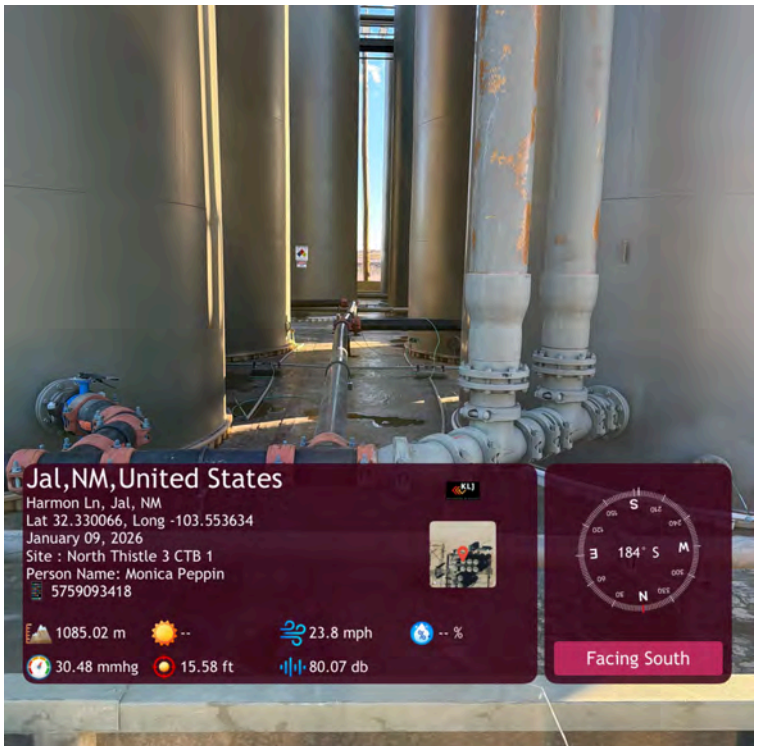
Photo of Lease Sign

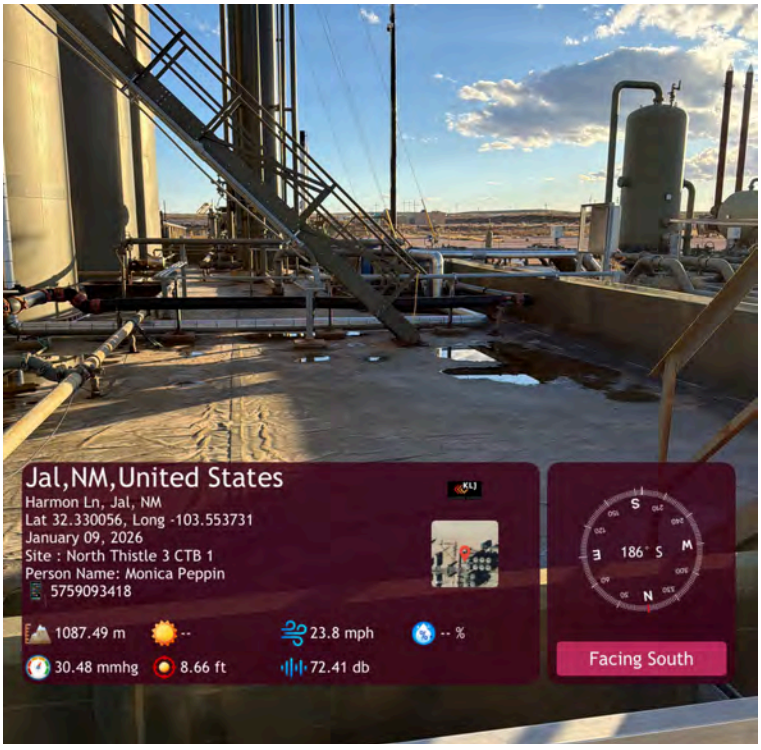
Observations and Field Notes

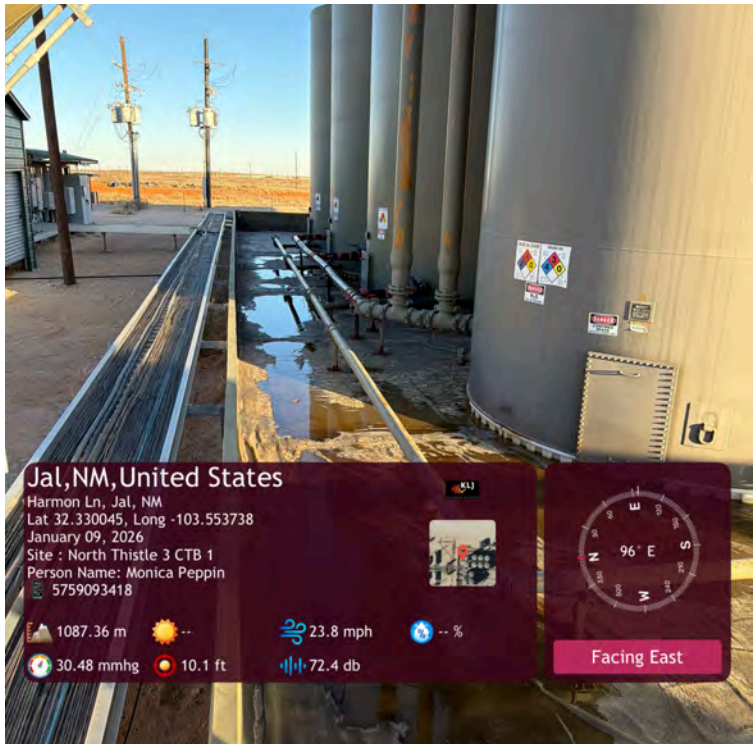
- 1:51 PM – Arrived on Site. Conducted a site safety assessment, reviewed potential hazards, and completed required safety documentation.
- 2:05 PM – Walked the lined secondary containment to visually assess overall conditions and confirm liner integrity.
- 2:04 PM – Initiated inspection activities within the lined secondary containment area. Visual observations focused on liner surface conditions, piping, and tank bases.
- 2:21 PM – No visible tears, punctures, or defects in the liner material were observed.

Photolog









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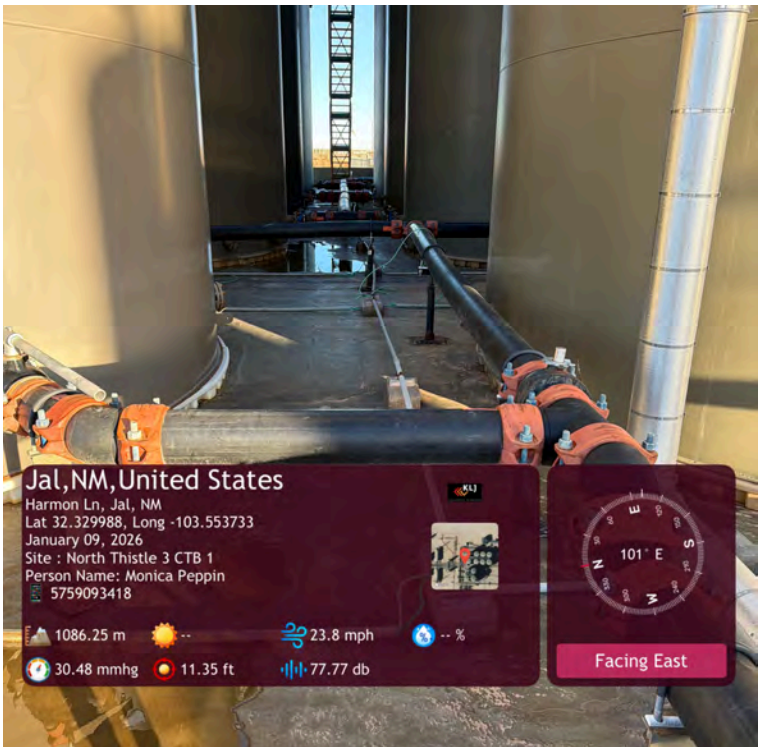

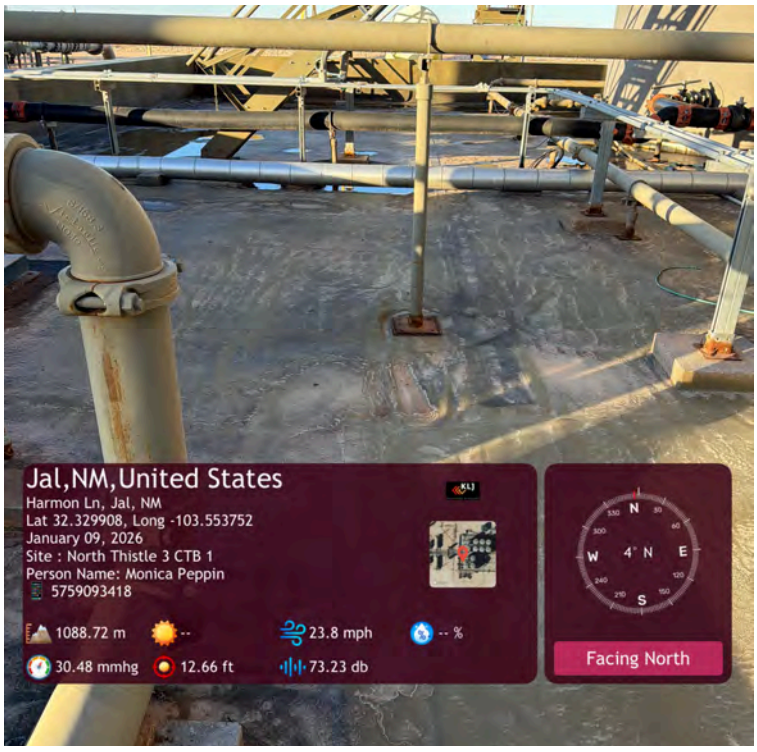

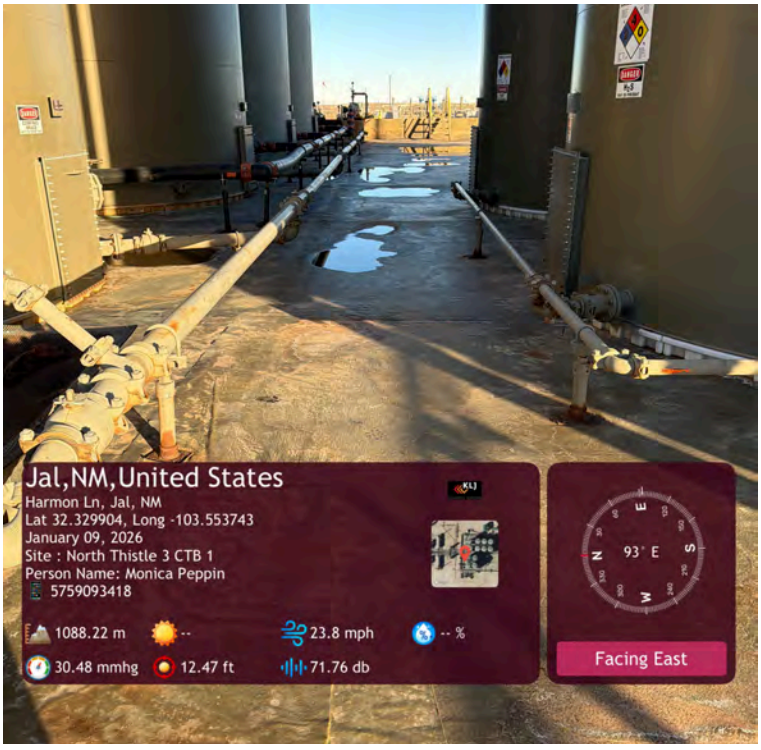

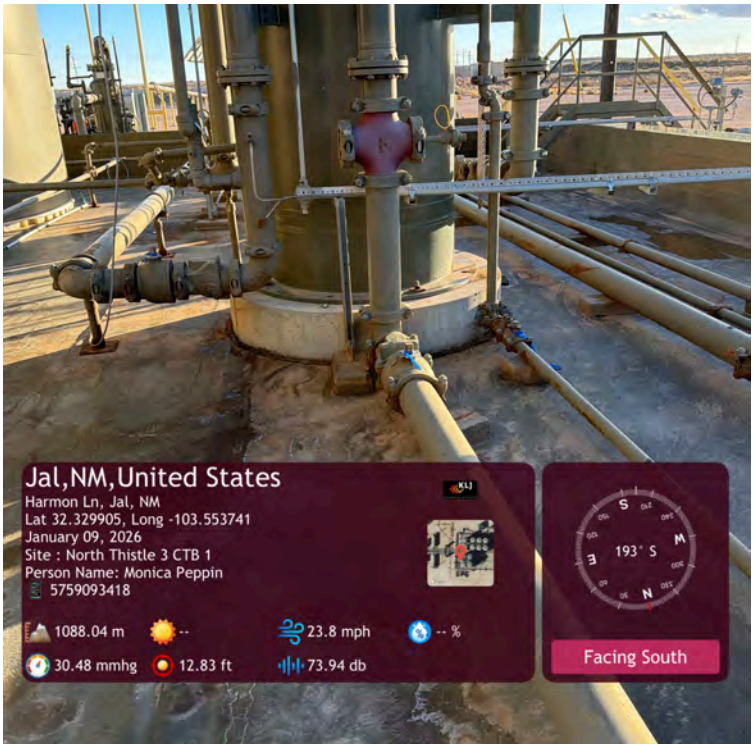

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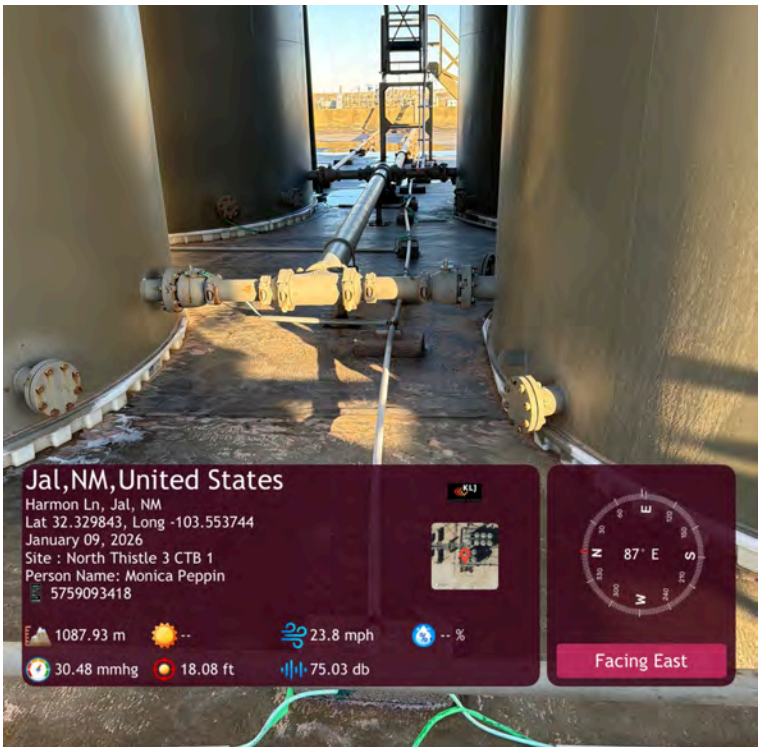

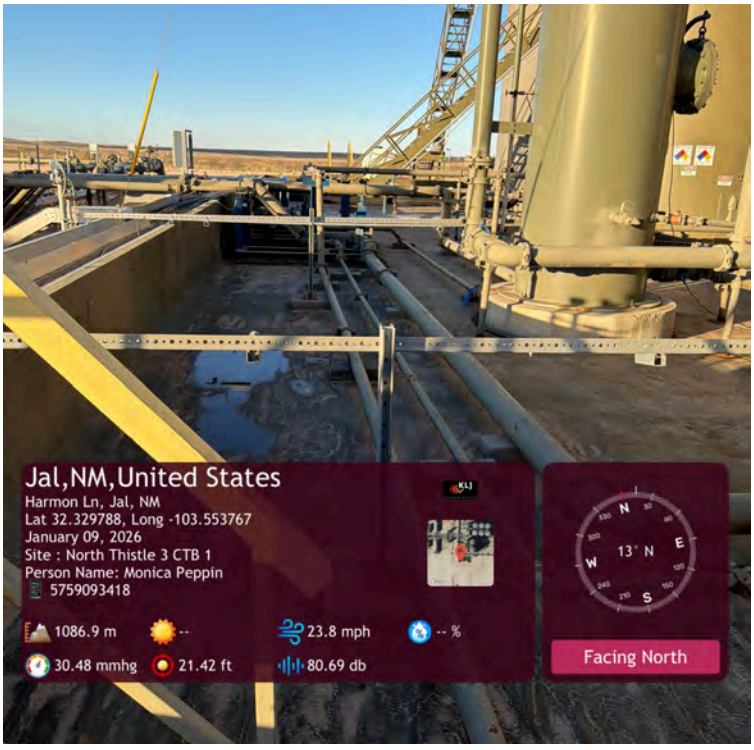

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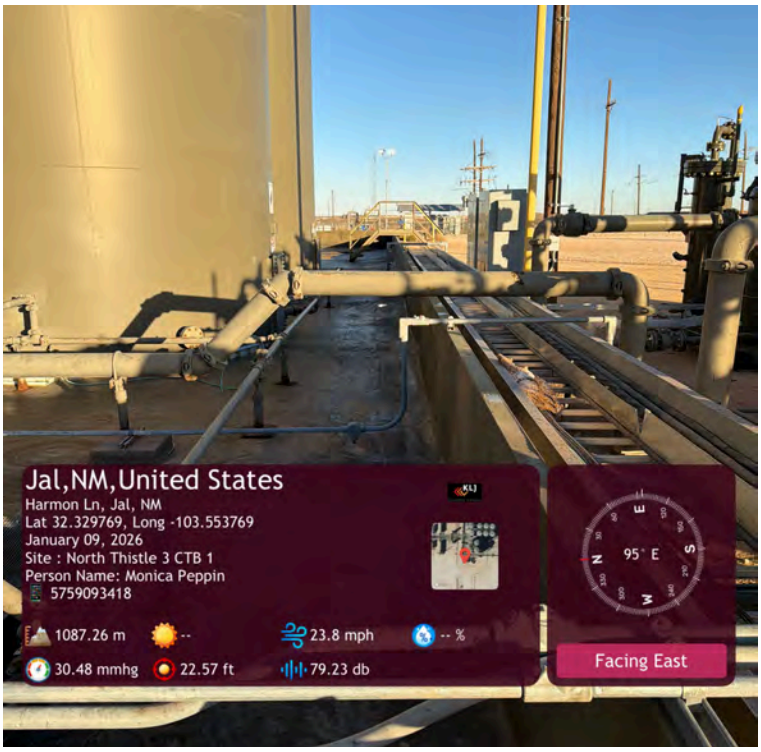

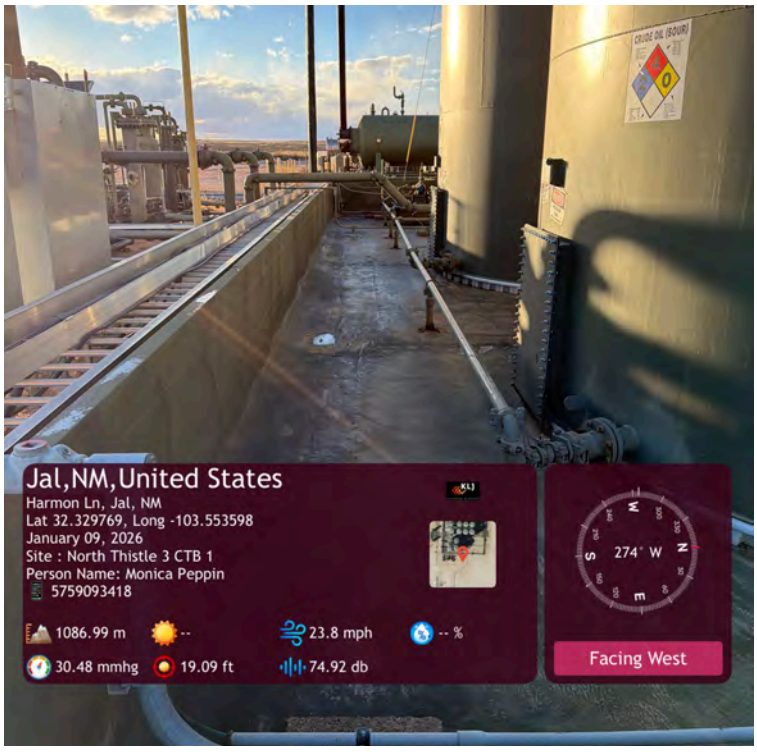

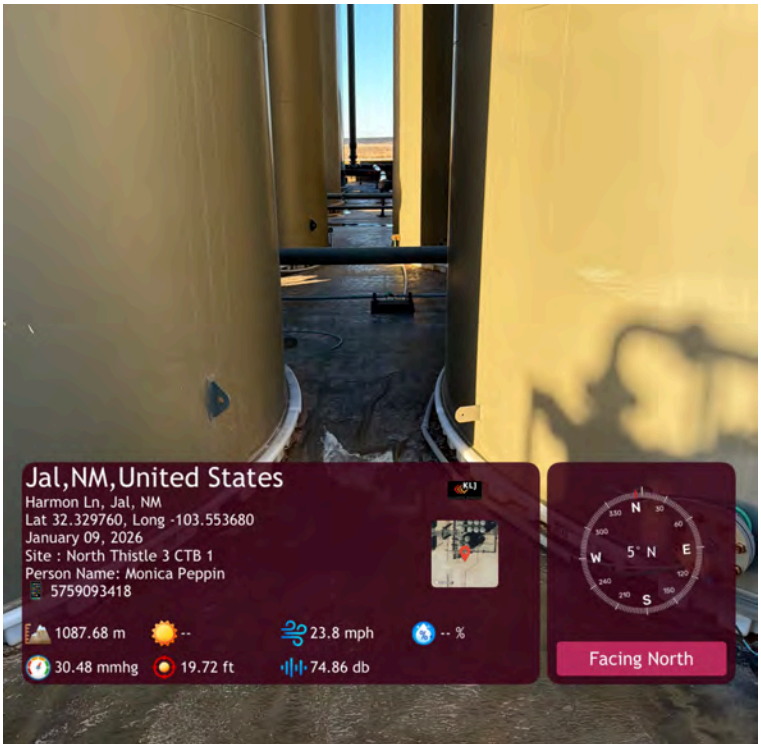

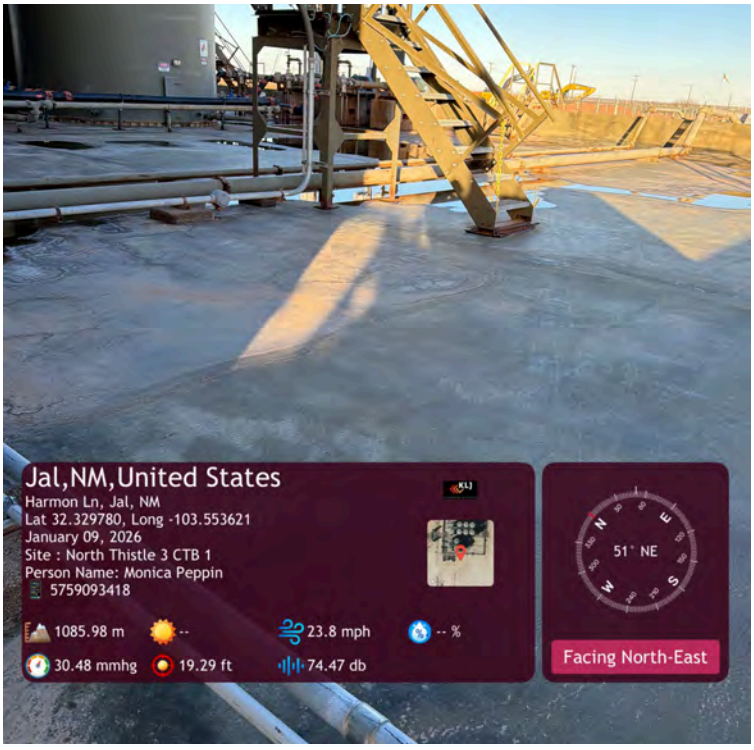

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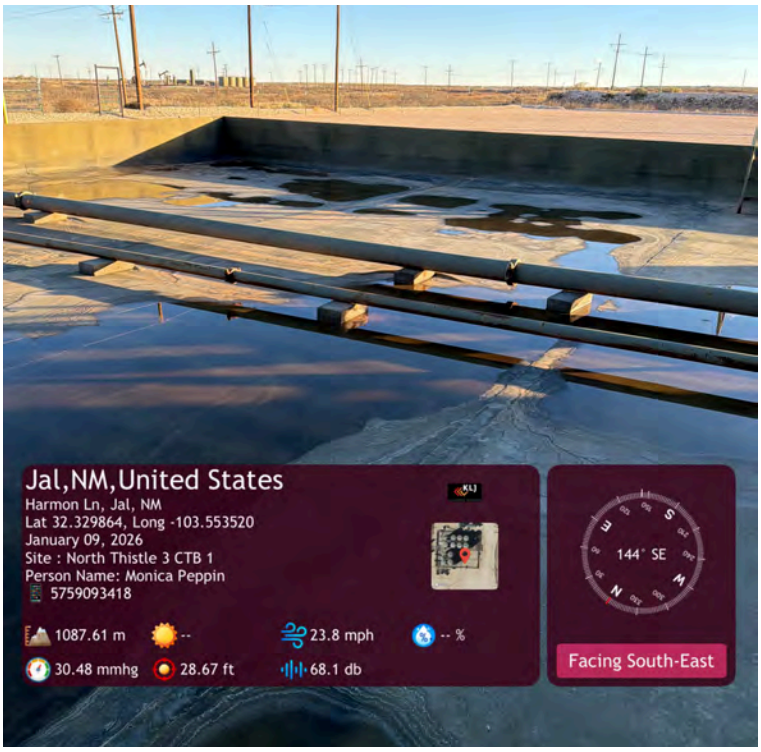
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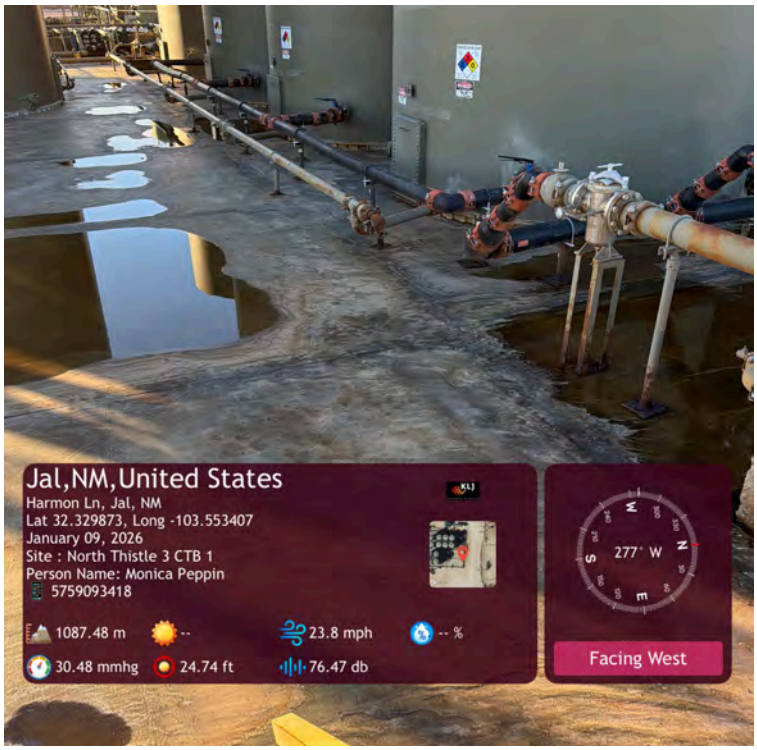
Harmon Ln, Jal, NM
Lat 32.329864, Long -103.553520
January 09, 2026
Site : North Thistle 3 CTB 1
Person Name: Monica Peppin
5759093418
1087.61 m
23.8 mph
30.48 mmhg
28.67 ft
68.1 db
144° SE
Facing South-East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January 09, 2026
Site : North Thistle 3 CTB 1
Person Name: Monica Peppin
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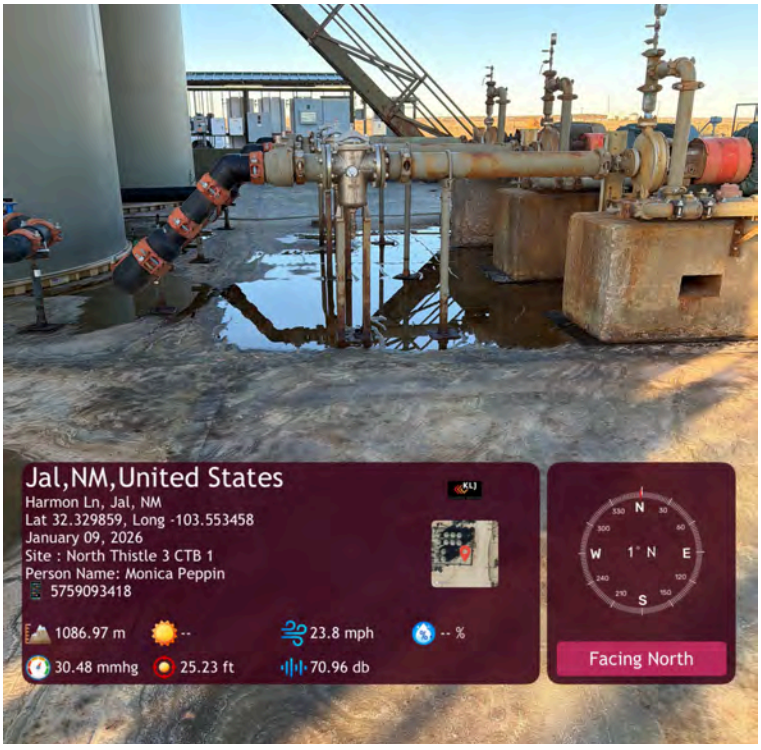
23.8 mph
30.48 mmhg
24.74 ft
76.47 db
277° W
Facing West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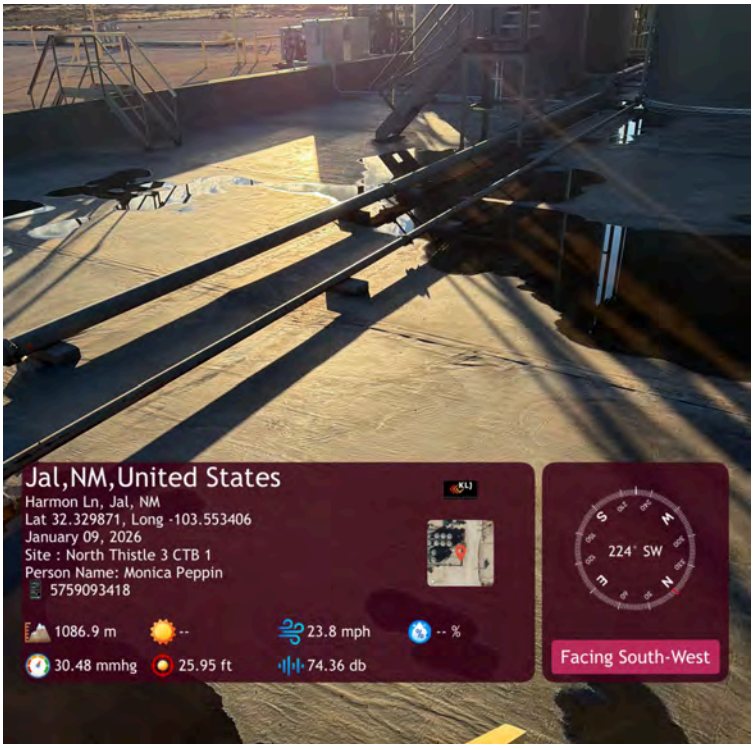
25.23 ft
70.96 db
1° N
Facing North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Person Name: Monica Peppin
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74.36 db
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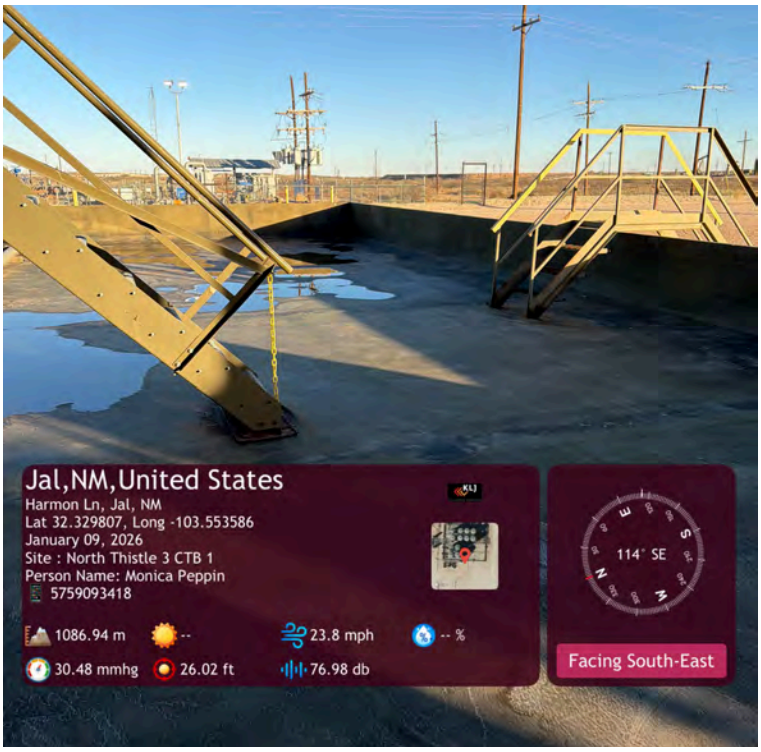
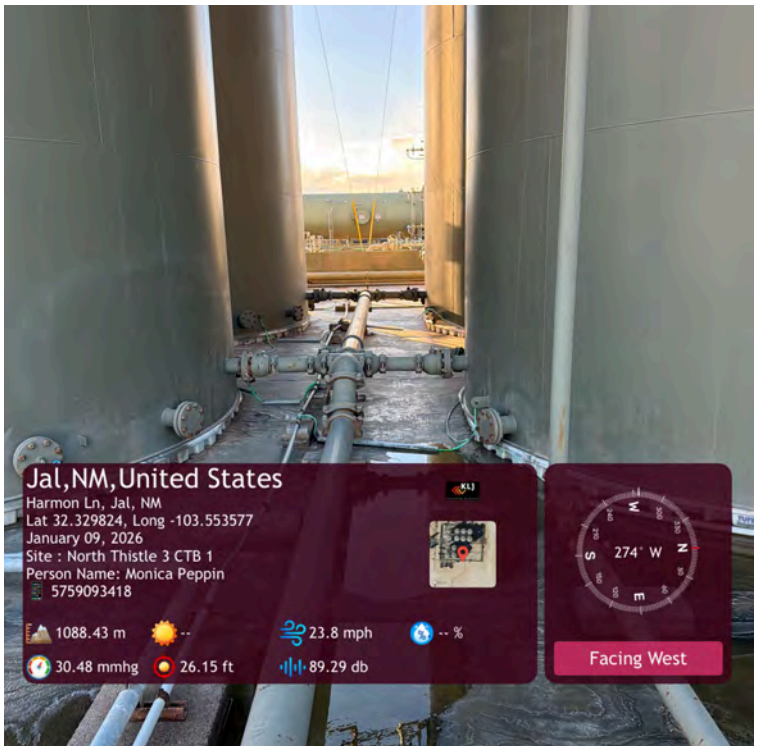
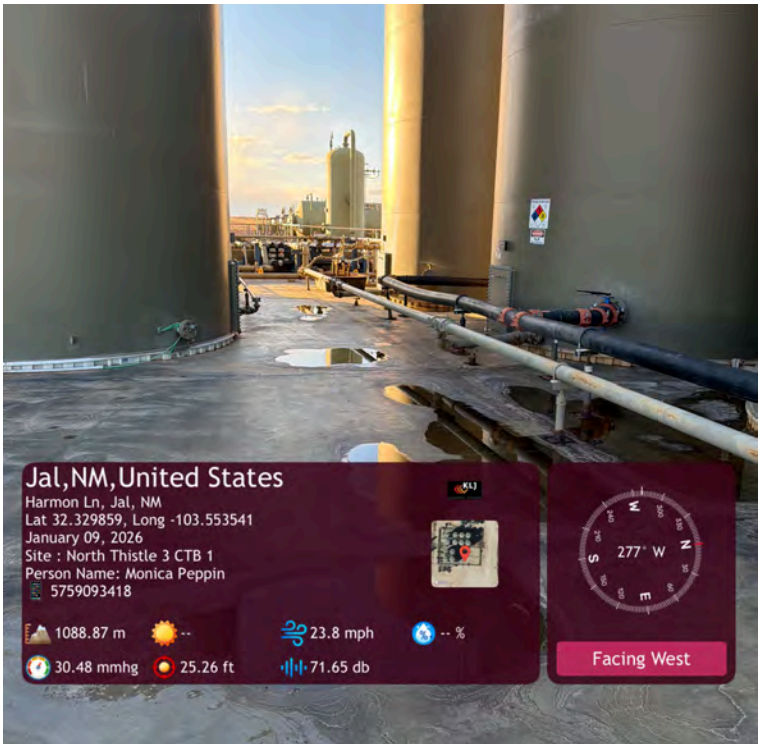
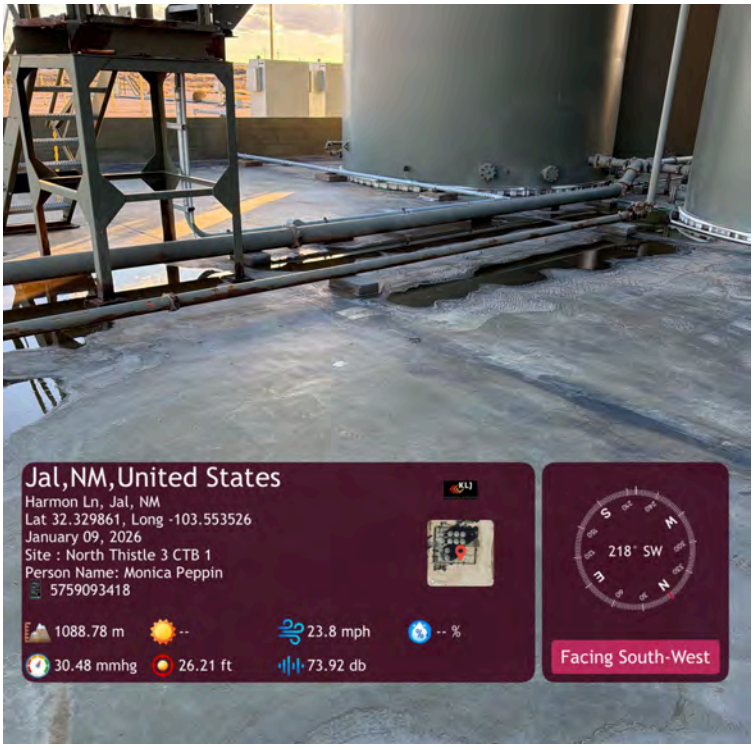
Facing South-West

Photolog









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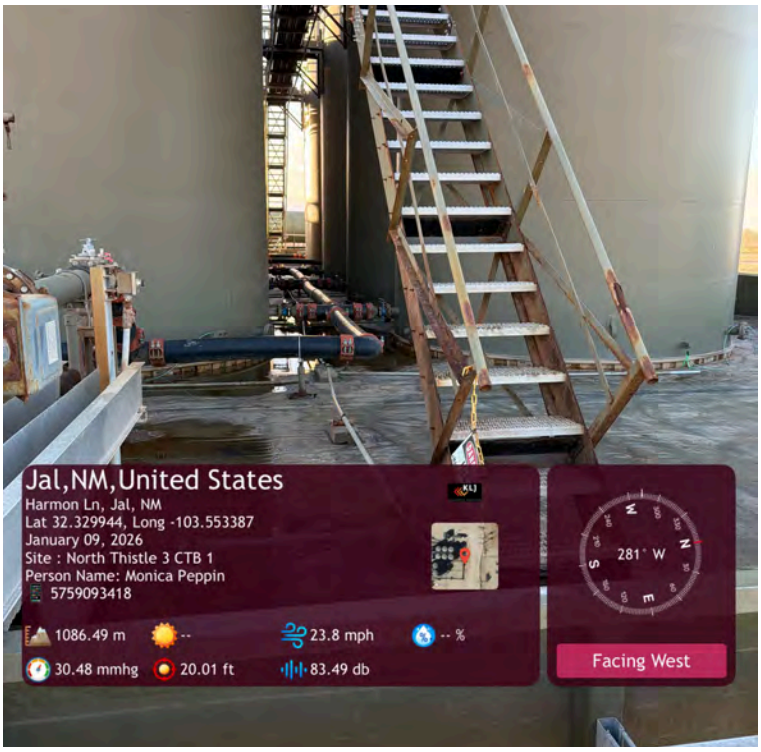
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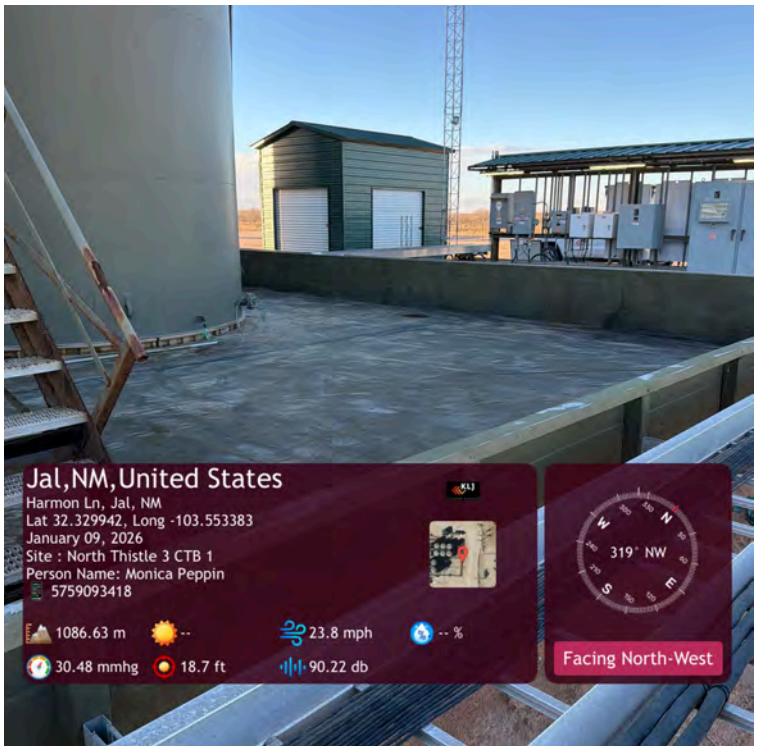
January 09, 2026
Site : North Thistle 3 CTB 1
Person Name: Monica Peppin
5759093418
1086.49 m
23.8 mph
30.48 mmhg
20.01 ft
83.49 db
281° W
Facing West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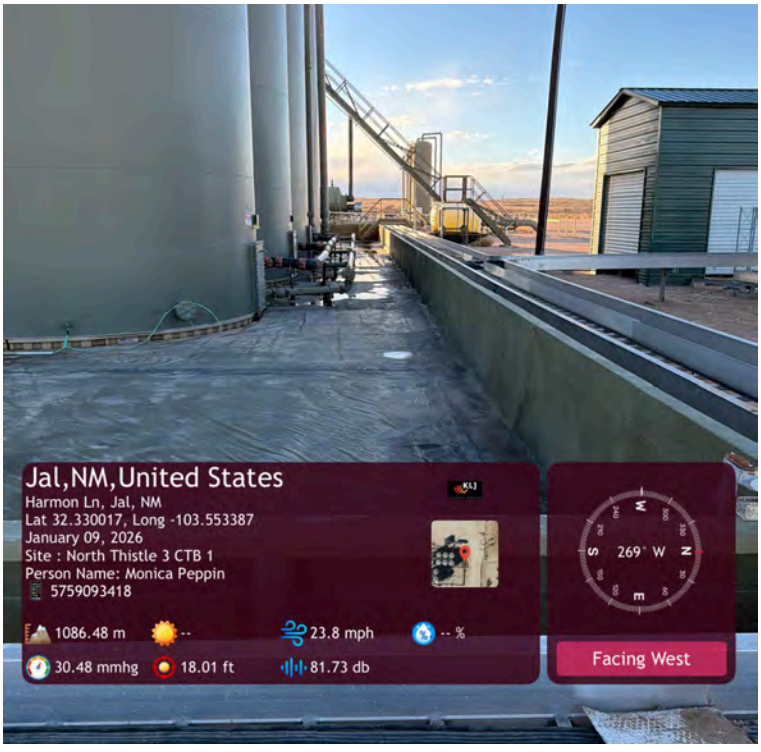
30.48 mmhg
18.7 ft
90.22 db
319° NW
Facing North-West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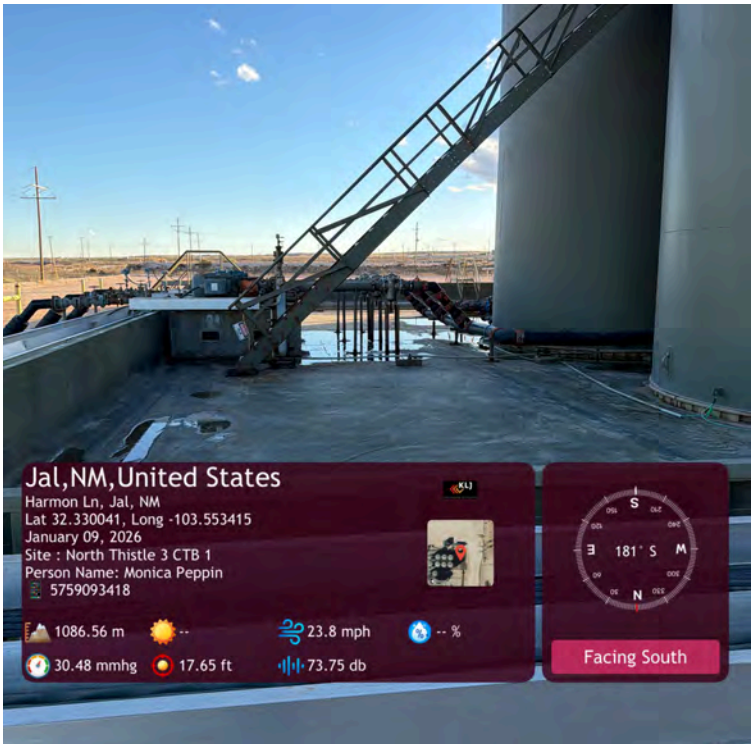
18.01 ft
81.73 db
269° W
Facing West


Jal,NM,United States
Harmon Ln, Jal, NM
Lat 32.330041, Long -103.553415
January 09, 2026
Site : North Thistle 3 CTB 1
Person Name: Monica Peppin
5759093418
1086.56 m
23.8 mph
30.48 mmhg
17.65 ft
73.75 db
181° S
Facing South

Additional Notes & Recommendations

- Liner meets standards to be in compliance.
- No further action for site.
- Draft and finalize closure report for all three incidents.
- Send report for closure request to regulatory agencies.

Acknowledgement & Signature

Technician: Monica Peppin **Date:** January 9, 2026

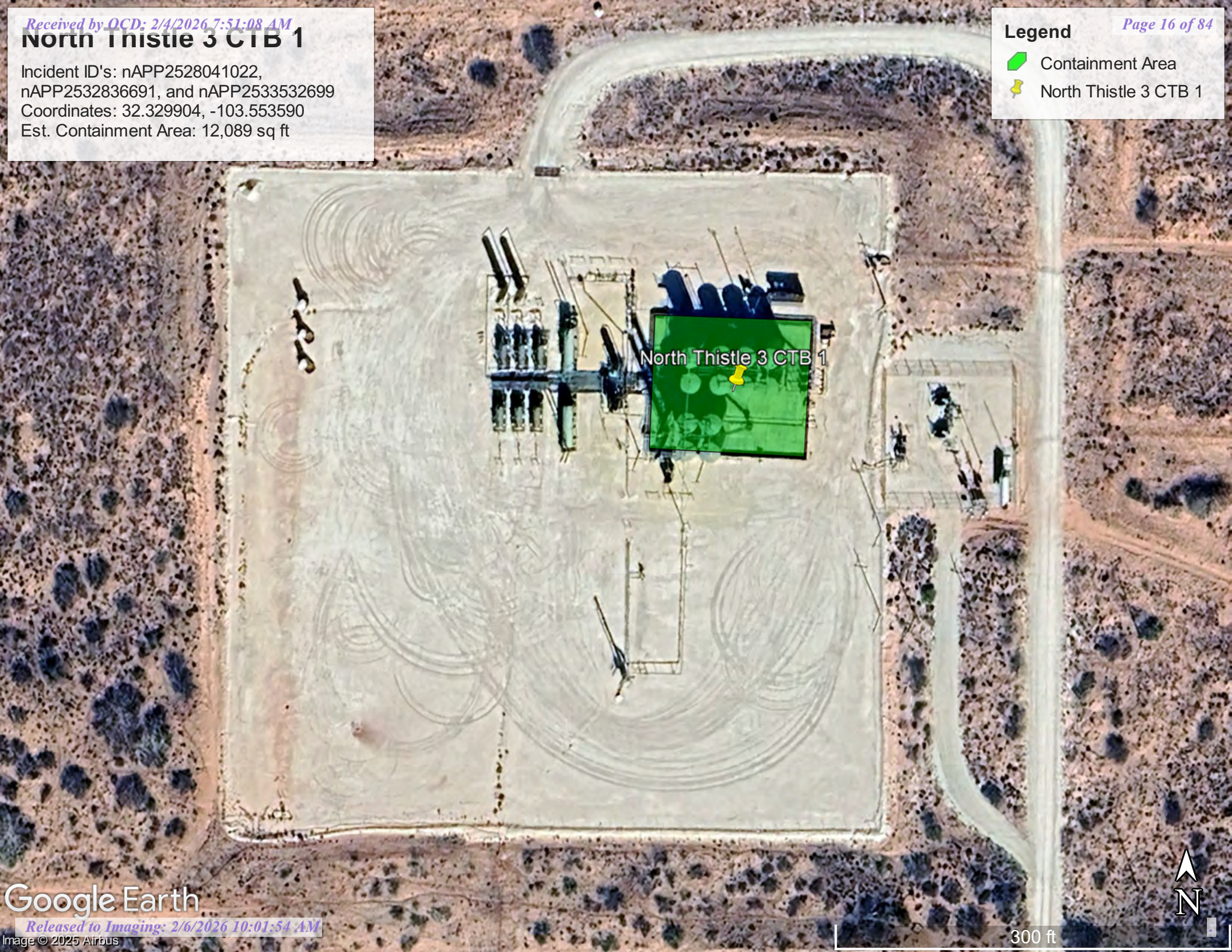
Signature: **Departure Time:** 2:42 PM

APPENDIX B

CLOSURE CRITERIA RESEARCH

North Thistle 3 CTB 1

Incident ID's: nAPP2528041022, nAPP2532836691, and nAPP2533532699
Coordinates: 32.329904, -103.553590
Est. Containment Area: 12,089 sq ft



North Thistle 3 CTB 1 - Nearest Pod for DTGW Determination

11/23/2025, 10:41:22 AM

OSE Pod 04797-P OD 1

OSE District Boundary

Soil & Water Conservation Districts

North Thistle 3 CTB 1

Nearest POD
04767-POD

POD Use
Monitor Well/Temp. BH for DTGW determination

Depth of Well
55 ft bgs

1:4,514

0 0.03 0.07 0.13 mi

0 0.05 0.1 0.2 km

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

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

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-04767

Well owner: Devon Energy Resources Phone No.: _____

Mailing address: 205 E Bender Road #105

City: Hobbs State: NM Zip code: 88240

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Vision resources

2) New Mexico Well Driller License No.: 1833 Expiration Date: 10-7-25

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jason Maley

4) Date well plugging began: 12-19-23 Date well plugging concluded: 12-19-23

5) GPS Well Location: Latitude: 32 deg, 19 min, 44.92 sec
Longitude: 103 deg, 33 min, 16.43 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 55 ft below ground level (bgl), by the following manner: Tape

7) Static water level measured at initiation of plugging: Dry ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 8-18-23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

OSE DIT JAN 12 2024 PM 1:51

Version: September 8, 2009
Page 1 of 2

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
0		77.50	77.50	Tremie pipe Open hole	
	Wyoming Bentonite				
55'					

OSE DII JAN 12 2024 PM1:51

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, _____ , say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

_____ 1/10/24

Signature of Well Driller Date

Version: September 8, 2009
Page 2 of 2

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/cgmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: C-4767-POD1

Name of well owner: Devon Energy Resources

Mailing address: 205 E Bender Road # 150 County: Lea

City: Hobbs State: NM Zip code: 88240

Phone number: 405-318-4697 E-mail: Dale.Woodall@DVN.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Vision Resources , Jason Maley

New Mexico Well Driller License No.: 1833 Expiration Date: 10/07/2023

IV. WELL INFORMATION: ☐ **Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.**

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 19 min, 44.92 sec
Longitude: 103 deg, 33 min, 16.43 sec, NAD 83

2) Reason(s) for plugging well(s): OSE DIT AUG 16 2023 PM1:22

32.329144, -103.554563 - No water found

3) Was well used for any type of monitoring program? no If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? no If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: no water feet below land surface / feet above land surface (circle one)

6) Depth of the well: 55 feet

750184

7) Inside diameter of innermost casing: 2 inches.

8) Casing material: PVC

9) The well was constructed with:

☐ an open-hole production interval, state the open interval:

☒ a well screen or perforated pipe, state the screened interval(s): 50-55 Feet

10) What annular interval surrounding the artesian casing of this well is cement-grouted? None

11) Was the well built with surface casing? no If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? If yes, please describe:

12) Has all pumping equipment and associated piping been removed from the well? Yes If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

☐ **If plugging method differs between multiple wells on same site, a separate form must be completed for each method.**

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

Temporary PVC casing will be removed and approximately 4.7 Cubic feet bentonite chips will be placed in well.

2) Will well head be cut-off below land surface after plugging? No well head will be installed.

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VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: DNA

4) Type of Cement proposed: DNA

5) Proposed cement grout mix: DNA gallons of water per 94 pound sack of Portland cement.

6) Will the grout be: DNA batch-mixed and delivered to the site

DNA mixed on site

7) Grout additives requested, and percent by dry weight relative to cement:

8) Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

Devon plans to have a licensed water well driller install an exploratory soil boring on location to determine the depth of groundwater. The soil boring will be installed up to a depth of 55 feet below ground surface (ft bgs). Temporary PVC well material will be placed to a depth of the boring and secured at the surface. The temporary well will be in place for a minimum of 72 hours at which time the well will be gauged for the presence of water. If water is encountered at any point during the boring installation, the soil boring will be plugged using a slurry of Portland Type 1/11 Neat Cement less than 6.0 gallons of water per 94 lb sack. If no water is encountered, the boring will be plugged using hydrated bentonite with drill cuttings to plug the upper 10 ft. bgs. The event will begin July 28, 2023 and continue through August 31, 2023.
North Thistle 3 CTB 1 at 32.329144, -103.554563.

VIII. SIGNATURE:

I, Dale Woodall, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Dale Woodall — Signature of Applicant

8/8/23 — Date

IX. ACTION OF THE STATE ENGINEER:

OSE DIT AUG 16 2023 PM1:22

This Well Plugging Plan of Operations is:

X Approved subject to the attached conditions.

_____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 18th day of August, 2023

Mike A. Hamman P.E., New Mexico State Engineer

By: K.Parekh

KASHYAP PAREKH

W.R.M. I

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)	Does Not Apply (DNA)	DNA	DNA
Bottom of proposed interval of grout placement (ft bgl)	DNA	DNA	DNA
Theoretical volume of grout required per interval (gallons)	DNA	DNA	DNA
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement	DNA	DNA	DNA
Mixed on-site or batch-mixed and delivered?	DNA	DNA	DNA
Grout additive 1 requested	DNA	DNA	DNA
Additive 1 percent by dry weight relative to cement	DNA	DNA	DNA
Grout additive 2 requested	DNA	DNA	DNA
Additive 2 percent by dry weight relative to cement	DNA	DNA	DNA

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	1-ft. Fill to one-ft below ground surface. Top 1-ft will be filled with soil backfill.		Zero feet below grade.
Bottom of proposed sealant of grout placement (ft bgl)	Bottom 55.0-ft. 0-20': Pour from surface 20 to 55': Tremie in bentonite chips.		
Theoretical volume of sealant required per interval (gallons)	Under a 100 gallons of water/enough to be adequate for hydrating the bentonite		
Proposed abandonment sealant (manufacturer and trade name)	Wyoming Bentonite		

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STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623- 8559

Applicant has identified wells, listed below, to be plugged. Jason Maley (Vision Resources) (WD-1833) will perform the plugging.

Permittee: Devon Energy
NMOSE Permit Number: C-4767-POD1

NMOSE File	Casing diameter (inches)	Well depth (feet bgl)	Approximate static water level (feet bgl)	Latitude	Longitude
C-4767-POD1	6.5 (Soil Boring)	55	Unknown	32° 19' 44.92"	103° 33' 16.43''

Specific Plugging Conditions of Approval for Well located in Lea County, New Mexico.

1. Water well drilling and well drilling activities, including well plugging, are regulated under 19.27.4 NMAC, which requires any person engaged in the business of well drilling within New Mexico to obtain a Well Driller License issued by the New Mexico Office of the State Engineer (NMOSE). Therefore, the firm of a New Mexico licensed Well Driller shall perform the well plugging.

2. Ground Water encountered: The total Theoretical volume of sealant required for abandonment of soil boring well is approximately 94.0 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 55 feet.

3. Dry Hole: The total Theoretical volume of sealant required for abandonment of soil boring well is approximately 17.2 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 10 feet.

4. Ground Water encountered: Type I/II Portland cement mixed with 5.2 to 6.0 gallons of fresh water per 94-lb sack of cement is approved for the plugging the well.

5. Dry Hole: (a) Drill cuttings up to ten feet of land surface. (b) 10 feet to 0 feet – Hydrated bentonite. The bentonite shall be hydrated separately with its required increments of water prior to being mixed into the cement slurry.

6. Sealant shall be placed by pumping through a tremie pipe extended to near well bottom and kept below top of the slurry column as the well is plugged from bottom-upwards in a manner that displaces

the standing water column upwards from below. Tremie pipe may be pulled as necessary to retain minimal submergence in the advancing column of sealant.

7. Should cement "shrinks-back" occur in the well, use of a tremie for topping off is required for cement placement deeper than 20 feet below land surface or if water is present in the casing. The approved sealant for topping off is identified in condition 3. and 4. of these Specific Conditions of Approval.

8. Any open annulus encountered surrounding the casing shall also be sealed by the placement of the approved sealant. When plugging shallow wells with no construction or environmental concerns, and if the well record on a well to be plugged shows a proper 20-foot annular seal, a plugging plan can propose the use of clean fill material to a nominal 30 feet bgs, then placing an OSE approved sealant to surface. Lacking that information, we would require an excavation of at least 2-feet which shall then be filled in its entirety with sealant to surface.

9. Should the NMED, or another regulatory agency sharing jurisdiction of the project authorize, or by regulation require a more stringent well plugging procedure than herein acknowledged, the more-stringent procedure should be followed. This, in part, includes provisions regarding pre-authorization to proceed, contaminant remediation, inspection, pulling/perforating of casing, or prohibition of free discharge of any fluid from the borehole during or related to the plugging process.

10. NMOSE witnessing of the plugging of the soil boring will not be required.

11. Any deviation from this plan must obtain an approved variance from this office prior to implementation.

12. A Well Plugging Record itemizing actual abandonment process and materials used shall be filed with the State Engineer within 30 days after completion of well plugging. For the plugging record, please resurvey coordinate location for well and note coordinate system for GPS unit. Please attach a copy of these plugging conditions.

The NMOSE Well Plugging Plan of Operations is hereby approved with the aforesaid conditions applied.

Witness my hand and seal this 18th day of August 2023

Mike A. Hamman, P.E. State Engineer

By: K. Parekh

Kashyap Parekh
Water Resources Manager I

Mike A. Hamman, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 750189
File Nbr: C 04768

Aug. 18, 2023

DALE WOODALL
DEVON ENERGY RESOURCES
205 E BENDER ROAD #150
HOBBS, NM 88240

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.

* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.

* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.

* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

Azucena Ramirez
(575)622-6521

Enclosure

explore

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL

Mike A. Hamman, P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623-8559

August 18, 2023

Devon Energy
205 E. Bender Road # 150
Hobbs, NM 88240

RE: Well Plugging Plan of Operations for well no. C-4767-POD1

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced well subject to the attached Conditions of Approval. The proposed method of operation is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 30, 2017 by the State Engineer. subject to the attached Conditions of Approval.

Within 30 days after the well is plugged, the well driller is required to file a complete plugging record with the OSE and the permit holder.

Sincerely,

K. Parekh

Kashyap Parekh
Water Resources Manager I

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER N. Thisle

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.): ~~C-4767~~ POD1	WELL TAG ID NO.	OSE FILE NO(S).: C-4767
WELL OWNER NAME(S): Devon Energy Resources		PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 205 E. Bender Road #150		CITY: Hobbs; STATE: NM; ZIP: 88240

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	19	44.92	N
LONGITUDE	103	33	16.43	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1833	Jason Maley	Vision Resources

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
12-13-23	12-13-23	55'	55'	Dry

COMPLETED WELL IS: ☐ ARTESIAN *add Centralizer info below ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): Dry

DATE STATIC MEASURED: 12-18-23

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐

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	45'	6"	2" PVC SCH40	Thread	2"	SCH40	N/A
45'	55'	6"	2" PVC SCH40	Thread	2"	SCH 40	.02

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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 *(if using Centralizers for Artesian wells- indicate the spacing below)	AMOUNT (cubic feet)	METHOD OF PLACEMENT
			None pulled and plugged0		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. C-4767-POD1	POD NO. 1	TRN NO. 750184	
LOCATION Expl 23.33.03.144		WELL TAG ID NO.	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	15'	15'	Red fine sand	Y ✓N	
15'	20'	5'	Brown sand with caliche	Y ✓N	
20'	55'	35'	Red sand with coarse rock	Y ✓N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
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				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: Dry hole

TOTAL ESTIMATED WELL YIELD (gpm): 0

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:

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

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:

Jason Maley — 1/10/24

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. C-4767-POD 1	POD NO. 1	TRN NO. 750184	
LOCATION Expl 23.33.03.144		WELL TAG ID NO. —	PAGE 2 OF 2

Mike A. Hamman, P.E.
State Engineer

well Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 750184
File Nbr: C 04767
Well File Nbr: C 04767 POD1

Jan. 12, 2024

DALE WOODALL
DEVON ENERGY RESOURCES
205 E BENDER ROAD #150
HOBBS, NM 88240

Greetings:

The above numbered permit was issued in your name on 08/18/2023.

The Well Record was received in this office on 01/12/2024, stating that it had been completed on 12/13/2023, 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 08/17/2024.

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

Sincerely,

Maret Thompson
(575)622-6521

drywell

File No. C-4767 POD1

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well*(Pump test)	☐ Construction Site/Public Works Dewatering	☒ Other(Describe): Exploratory Borehole
☐ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

*New Mexico Environment Department-Drinking Water Bureau (NMED-DWB) will be notified if a proposed exploratory well is used for public water supply.

☒ Temporary Request - Requested Start Date: 7/24/2023	Requested End Date: 8/31/2023
Plugging Plan of Operations Submitted? ☒ Yes ☐ No	

1. APPLICANT(S)

Name: Devon Energy Resources	Name:
Contact or Agent: Dale Woodall — check here if Agent ☐	Contact or Agent: — check here if Agent ☐
Mailing Address: 205 E Bender Road # 150	Mailing Address:
City: Hobbs	City:
State: NM — Zip Code: 88240	State: — Zip Code:
Phone: 405-318-4697 — ☐ Home ☐ Cell Phone (Work):	Phone: — ☐ Home ☐ Cell Phone (Work):
E-mail (optional): dale.woodall@dvn.com	E-mail (optional):

OSE DII AUG 16 2023 PM1:21

FOR OSE INTERNAL USE — Application for Permit, Form WR-07, Rev 07/12/22

File No.: C-4767	Trn. No.: 750184	Receipt No.: 2-46118
Trans Description (optional): MON		
Sub-Basin: CUB	PCW/LOG Due Date: 8/17/24	

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

■ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
C-4767 POD1	103.554563	32.329144	Section 3, T23S, R33E

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ■ No **If yes, how many** NA

Other description relating well to common landmarks, streets, or other:
North Thistle 3 CTB 1

Well is on land owned by: State

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ■ No
If yes, how many_____

Approximate depth of well (feet): 55	Outside diameter of well casing (inches): 2
Driller Name: Vision Resources Jason Maley	Driller License Number: 1833

OSE DII AUG 16 2023 PM1:21

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Devon plans to have a licensed water well driller install an exploratory soil boring on location to determine the depth of groundwater. The soil boring will be installed up to a depth of 55 feet below ground surface (ft bgs). Temporary PVC well material will be placed to a depth of the boring and secured at the surface. The temporary well will be in place for a minimum of 72 hours at which time the well will be gauged for the presence of water. If water is encountered at any point during the boring installation, the soil boring will be plugged using a slurry of Portland Type 1/11 Neat Cement less than 6.0 gallons of water per 94 lb sack. If no water is encountered, the boring will be plugged using hydrated bentonite with drill cuttings to plug the upper 10 ft. bgs. The event will begin July 28th, 2023 and continue through August 31st, 2023.
North Thistle 3 CTB 1, 32.329144, -103.554563

FOR OSE INTERNAL USE Application for Permit, Form WR-07 Version 07/12/22

File No.: C-4767	Trn No.: 750184

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
Is proposed well a future public water supply well? ☐ Yes ☒ NO If Yes, an application must be filed with NMED-DWB, concurrently. ☐ Include a description of the requested pump test if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge. ☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring ☐ The reason and duration of the monitoring is required.		**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Dale Woodall
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Dale Woodall
Applicant Signature

Dale Woodall
Applicant Signature

ACTION OF THE STATE ENGINEER

OSE DIT AUG 16 2023 PM1:21

This application is:

☑ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 18th day of August 20 23, for the State Engineer,

Mike A. Hamman, P.E., State Engineer

By: K. Parekh
Signature

Kashyap Parekh
Print

Title: Water Resources Manager I
Print

FOR OSE INTERNAL USE Application for Permit, Form WR-07 Version 07/12/22

File No.: C-4767 Trn No.: 750184

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

17-16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.

17-1A Depth of the well shall not exceed the thickness of the valley fill.

17-4 No water shall be appropriated and beneficially used under this permit.

17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

Trn Desc: C 04767 POD1 File Number: C 04767
Trn Number: 750184

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.

17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.

17-Q The State Engineer retains jurisdiction over this permit.

17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

Trn Desc: C 04767 POD1 File Number: C 04767
Trn Number: 750184

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

LOG The Point of Diversion C 04767 POD1 must be completed and the Well Log filed on or before 08/17/2024.

SHOULD THE PERMITTEE CHANGE THE PURPUSE OF USE OTHER THAN MONITORING PURPOSES, AN APPLICATION SHALL BE ACQUIRED FROM THE OFFICE OF THE STATE ENGINEER.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd: Date Rcvd. Corrected:
Formal Application Rcvd: 08/16/2023 Pub. of Notice Ordered:
Date Returned - Correction: Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 18 day of Aug A.D., 2023

Mike A. Hamman, P.E., State Engineer

By: K. Parekh
KASHYAP PAREKH

Trn Desc: C 04767 POD1 File Number: C 04767
Trn Number: 750184

Mike A. Hamman, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 750184
File Nbr: C 04767

Aug. 18, 2023

DALE WOODALL
DEVON ENERGY RESOURCES
205 E BENDER ROAD #150
HOBBS, NM 88240

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.

* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.

* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.

* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

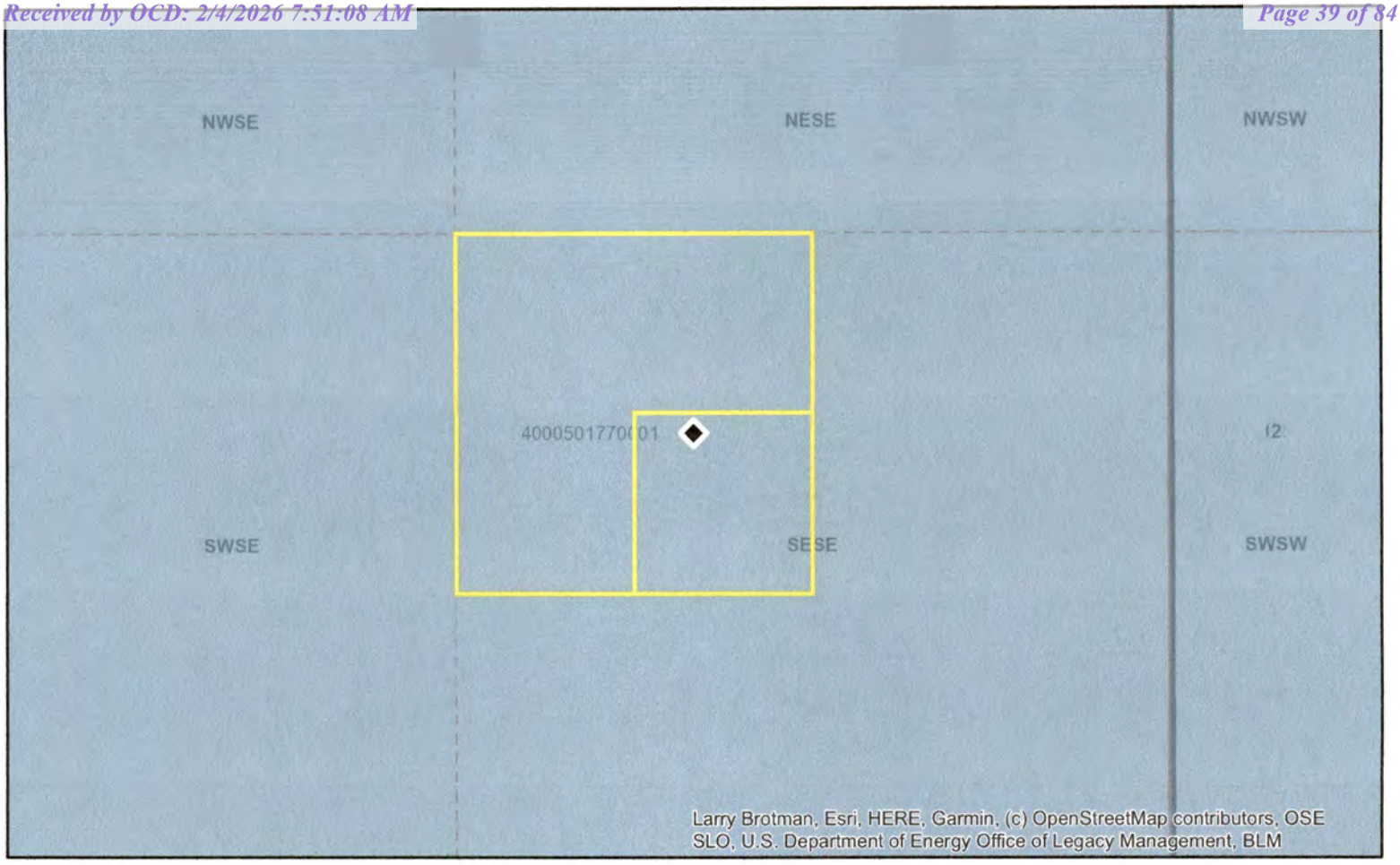
Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

Azucena Ramirez
(575)622-6521

Enclosure

explore



Coordinates

UTM - NAD 83 (m) - Zone 13

Easting 636046.362
Northing 3577837.023

State Plane - NAD 83 (f) - Zone E

Easting 781886.661
Northing 484347.072

Degrees Minutes Seconds

Latitude 32 : 19 : 44.918400
Longitude -103 : 33 : 16.426800

Location pulled from Coordinate Search

NEW MEXICO OFFICE OF THE STATE ENGINEER

1:4,514
ft
0 90 180 360

N

8/18/2023

Office of the State Engineer
nm
Interstate Stream Commission

Spatial Information

County: Lea
Groundwater Basin: Carlsbad
Abstract Area: Carlsbad 72-12-1
Land Grant: Not in Land Grant
Carlsbad Underground Basin
Restrictions:

PLSS Description

SENWSESE Qtr of Sec 03 of 023S 033E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

Parcel Information

UPC/DocNum: 4000501770001
Parcel Owner: State Of New Mexico
Address: null null 87501

Legal: Township 23 S Range 35 E Section 4 320 Ac Being Lots 1-2-3-4, S2N2 State Patent #4223 *1993-Maddox, W A Est Asgn Cont* B-878 P-321 8/10/04-Keller Rv Llc 2009-Redescribed Prt Fr #50178

POD Information

Owner:
File Number:
POD Status: NoData
Permit Status: NoData
Permit Use: NoData
Purpose:

- Calculated PLSS
- Coord Search Location

Water Right Regulations

- Closure Area
- OSE District Boundary

New Mexico State Trust Lands

- Both Estates
- SiteBoundaries
- Bernalillo County Parcels 2022
- Catron County Parcels 2022
- Chaves County Parcels 2022
- Cibola County Parcels 2022
- Colfax County Parcels 2022
- Curry County Parcels 2022
- De Baca County Parcels 2022
- Doña Ana County Parcels 2022
- Eddy County Parcels 2022
- Harding County Parcels 2022
- Hidalgo County Parcels 2022
- Grant County Parcels 2022
- Guadalupe County Parcels 2022
- Lea County Parcels 2022
- Lincoln County Parcels 2022
- Los Alamos County Parcels 2022
- Luna County Parcels 2022
- McKinley County Parcels 2022
- Mora County Parcels 2022
- Otero County Parcels 2022
- Quay County Parcels 2022
- Rio Arriba County Parcels 2022
- Roosevelt County Parcels 2022
- Sandoval County Parcels 2022
- San Juan County Parcels 2022
- San Miguel County Parcels 2022
- Santa Fe County Parcels 2022
- Sierra County Parcels 2022
- Socorro County Parcels 2022
- Taos County Parcels 2022
- Torrance County Parcels 2022
- Union County Parcels 2022
- Valencia County Parcels 2022
- Sections

VERTEX

To Whom It May Concern,

Please review the information listed below and the attached email correspondence that includes guidance from NM SLO's ECO division regarding permission to drill on SLO surface. The proposed borehole location listed on the WR-07 permit would be drilled on a traditional oil and gas well site or facility actively leased by Devon Energy on SLO surface. Lastly, please email eco@slo.state.nm.us after the permit has been initially processed. Attn: Tami Knight

Location Name: NORTH THISTLE 3 CTB 1

Facility ID #: [fAPP2130622273]

General Facility Information

Operator: [6137] DEVON ENERGY PRODUCTION COMPANY, LP

Status: Active

District: Hobbs

County: Lea (25)

Type: Flare Stack - (FS)

Surface Owner: State

Surface Location: P-03-23S-33E 1147 FSL 709 FEL
Lat/Long: 32.329666,-103.554004 NAD83

OSE DIT AUG 16 2023 PM1:20

Quarter-Quarter:

Directions:

Notes

This facility was registered on 11/02/2021 by gchelsey for DEVON ENERGY PRODUCTION COMPANY, LP [6137] (action id: 59094).

From: Henne, Lisa
To: Knight, Tami C.
Cc: Michael Moffitt
Subject: convo with Michael Moffitt re process with OSE for soil boring permit applications
Date: August 8, 2023 3:58:45 PM
Attachments: image003.png

Hi Tami,

I just spoke with Michael Moffitt (cc'd here) about several soil boring applications that he will be submitting to OSE (I think on active Devon leases but he will confirm). I asked Michael to follow the process that we discussed this afternoon in our meeting: submit the soil boring permit applications directly to OSE along with the active SLO lease(s) or instrument, and to also provide OSE with your contact info to verify authorization from SLO to drill the boreholes.

Someone from OSE should then email you a scan of the application materials to review and respond with whether they can proceed to issue the permits. I suggested he also include my contact info in the packet as a backup. I do my best to respond to OSE within 24 hours so that we don't hold up the show (unless there is a problem with the application, in which case I still try to respond within 24 hours to tell them we need to look into it further). Is there a general ECO email account that more than one person in your shop can monitor in case someone is out, or should it go to your email?

Safe travels!

Thanks, Lisa

Lisa Henne, PhD, JD
Associate Counsel
Office of General Counsel
505.827.5702
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148
lhenne@slo.state.nm.us
nmstatelands.org

North Thistle 3 CTB 1 - Nearest Domestic Well Map

11/3/2025, 1:32:05 PM

Override 1

GIS WATERS PODs

- Pending
- Active
- Plugged

Nearest Domestic Pod

C-03582-Pod1

Use

Livestock Watering

Distance

1.43 miles

1:18,307

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

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

Monica Peppin

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

Fi . C-3582

NEW MEXICO OFFICE OF THE STATE ENGINEER

CHANGE OF OWNERSHIP OF 72-12-1 PERMIT FOR (check one):

☐ **Individual**	☐ **Corporation**
☐ **Trustee**	☐ **Partnership**
☐ **Estate**	■ **Limited Liability Co.**

1. OWNER OF RECORD (Seller)

Name: Limestone Livestock, LLC	Name:	
Phone: ☐ Home ☐ Cell Phone (Work):	Phone: ☐ Home ☐ Cell Phone (Work):	
a. Owner of Record File No: C-3582	**b.** Sub-file No.: n/a	**c.** Cause No.: n/a

2. NEW OWNER (Buyer) Note: If more owners need to be listed, attach a separate sheet. Attached? ☐ Yes

Name: Limestone Basin Properties Ranch, LLC	Name:
Contact or Agent: check here if Agent ☐ John Langdon	Contact or Agent: check here if Agent ☐
Mailing Address: 3300 North A Street, Building 1, Suite 220	Mailing Address:
City: Midland	City:
State: **TX** Zip Code: **79705**	State: Zip Code:
Phone: ☐ Home ☐ Cell Phone (Work): (210)-835-8057	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional): john@bpranches.com	E-mail (optional):

Required: Submit warranty deed(s) or other instrument(s) of conveyance properly recorded with the county clerk's office.

3. PURPOSE OF USE & AMOUNT CONVEYED

Check all that apply:	Amount of Water (acre-feet per annum):
☐ Domestic ■ Livestock ☐ Multiple House ☐ Drinking & Sanitary	3.0

4. LIST ALL KNOWN WELL (POD) FOR THE 72-12-1 PERMIT CONVEYED

OSE POD No.	Well Tag ID No. (if applicable)	Subdivision	Section or X	Township or Y	Range
C-3582 POD1	n/a	SE/4NW/4NW/4	14	23S	33E

5. CHECK HERE IF WELL IS SHARED BY MULTIPLE HOUSEHOLDS: ☐

Note: Attach an updated list of lots served and owner contact information.

FOR OSE INTERNAL USE — Change of Ownership, Form wr-02d, Rev 9/08/17

File No.: C-3582	Trn. No.: 642063	Well Tag ID No. (if applicable): —
Trans Desc. (optional): COWNR	Sub-Basin: C	Receipt No.: 2-40579

6. ADDITIONAL STATEMENTS OR EXPLANATIONS

For questions and to return for filing with the appropriate County Clerk, please return to:
Attn: Chris Cortez, Atkins Engineering Associates,Inc.
2904 W 2nd St.
Roswell, NM 88201

ACKNOWLEDGEMENT FOR INDIVIDUAL

I, We (name of owner(s)), _____
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

_____ _____
Signature Signature

State of _____)
ss.
County of _____)

This instrument was acknowledged before me this _____ day of _____ A.D., 20 _____, by (name of owner(s)):

_____

Notary Public: _____
My commission expires: _____

ACKNOWLEDGEMENT FOR CORPORATION

I, We (name of owner(s)), John Langdon, CFO on behalf of Limestone Basin Properties Ranch, LLC
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

_____ _____
Officer Signature Officer Signature

State of Texas)
ss.
County of Midland)

This instrument was acknowledged before me this 31 day of January A.D., 20 19, by the following on behalf of said corporation.

Name of Officer: John Langdon
Title of Officer: CFO
Name of Corporation Acknowledging: Limestone Basin Properties Ranch, LLC
State of Corporation: Delaware

TARA L MASTERS
NOTARY PUBLIC
STATE OF TEXAS
MY COMM. EXP. 3/12/20
NOTARY ID 12891865-2

Notary Public: _____
My commission expires: 3/12/20

FOR OSE INTERNAL USE Change of Ownership, Form wr-02d, Rev 9/08/17

File No.: C-3582	Trn. No.: 642063	Well Tag ID No. (if applicable): —
Trans Desc. (optional): COWNE	Sub-Basin: C	Receipt No.: 2-40579

Page 2 of 2

QUITCLAIM WATER DEED AND ASSIGNMENT

LIMESTONE LIVESTOCK, LLC, a New Mexico limited liability company ("**Grantor**"), for consideration paid, quitclaims, grants and assigns to **LIMESTONE BASIN PROPERTIES RANCH, LLC**, a Delaware limited liability company, having an address of 18 Desta Drive, Midland, Texas 79705 ("**Grantee**"), the following, pertaining to or located on or above (a) the real property in Lea County, New Mexico more particularly described on **Exhibit A** attached hereto and incorporated herein (the "**Deeded Land**"), (b) the real property subject to New Mexico State Agricultural Leases Nos. GR 2287, GT 2728 and GT 3124 (the "**State Lease Land**"), and (c) and the real property subject to the San Simon Swale I-76048 and San Simon Swale II-76148 Federal grazing allotment permits (the "**Federal Lease Land**"; the Deeded Land, the State Lease Land and the Federal Lease Land referred to, collectively, as the "**Land**"): any and all water, water rights, flood rights and other rights relating to water, whether perfected or unperfected, decreed or undecreed, adjudicated or unadjudicated, licensed or unlicensed, permitted or unpermitted, declared or undeclared, Mendenhall, surface or underground, appropriated or unappropriated, or other, associated with or held, used, or useful in connection with, or with points of diversion or places of use on, the Lands, including, without limitation, all rights, titles and interests in, to and under the New Mexico State Engineer File Numbers listed on **Exhibit B** attached hereto and incorporated herein, TOGETHER WITH any and all (i) rights, titles, interests and claims in, to or under, and applications and permits for, associated with or relating to any of the foregoing; (ii) storage rights, purchase contracts, sale contracts, leases, taps, withdrawal rights, diversion rights, rights, claims and entitlements associated with beneficial use, and other rights, in, to or under or associated with or relating to any of the foregoing; (iii) pending and approved applications for permits, and permits, to appropriate water for any purpose from a point of diversion or place of use on the Land or to drill a water well on the Land for any purpose, including but not limited to exploration for or production of water or for monitoring water levels or water quality; (iv) canals and canal rights, ditches and ditch rights, acequia and acequia rights, springs and spring rights, and reservoirs and reservoir rights, located or having a place of use on, or relating to water or water rights associated with or held, used or useful in connection with, or with points of diversion or places of use on, the Land; (v) shares of stock and other interests in any irrigation, ditch or reservoir company that provides, may provide, or has provided water to the Land; (vi) all water wells (including, without limitation, domestic, livestock, commercial, industrial, exploration, monitoring and irrigation wells), and rights associated with water wells on or having a place of use on, or relating to water or water rights associated with or held, used or useful in connection with, or with points of diversion on, the Land; (vii) points of diversion, water well bores, water exploration drill holes, pumps, pumping stations, motors, meters, casing, tubing, pipes, pipelines, pipeline equipment and facilities, irrigation equipment and facilities, livestock, game and other animal watering equipment and facilities, electric power lines and other utility equipment and facilities, tanks, dams, weirs, other diversion works, ditches, acequias, headgates, turnouts, and other equipment, facilities, property, structures and devices associated with, used or useful in connection with any of the foregoing, including without limitation the diversion, conveyance, measurement, storage or use of the foregoing water, water rights, other rights, applications, permits, claims, entitlements and contracts, or located on the Land, or relating to water or water rights associated with or held, used or useful in connection with, or with points of diversion and/or places of use on, the Land; (viii) easements, rights of way, licenses, use permits, water well permits, other permits, covenants, contract rights, applications, claims, entitlements, contracts, leases, and other rights, titles and interests associated with or held, used or useful in

US 5849615

LEA COUNTY, NM
KEITH MANES, COUNTY CLERK
31405
Book 2140 Page 495
1 of 6
10/09/2018 04:11 PM
BY ANGIE BEAUCHAMP

connection with, any of the foregoing; and (ix) rents, income, profits, proceeds, and products of and from any of the foregoing.

ALL WELLS, PIPELINE SYSTEMS AND DRINKING TROUGHS ARE TRANSFERRED IN THEIR "AS IS" CONDITION AND WITHOUT ANY WARRANTIES AS TO CONDITION OR FITNESS BY EXPRESS OR IMPLIED.

FURTHER THE PROPERTY CONVEYED BY THIS QUITCLAIM DEED IS TRANSFERRED WITH NO REPRESENTATION OR WARRANTY AS TO THE CONDITION OF THE PROPERTY, INCLUDING, BUT NOT LIMITED TO ANY ENVIRONMENTAL CONDITION OR HAZARD.

[SIGNATURE AND ACKNOWLEDGEMENT PAGE FOLLOWS]

IN WITNESS WHEREOF, Grantor has caused these presents to be executed as of this 9 day of Oct, 2018.

GRANTOR:

LIMESTONE LIVESTOCK, LLC, a New Mexico limited liability company

By: _____
Name: Bill Angell
Title: Manager

State of New Mexico)
) ss.
County of Lea)

This instrument was acknowledged before me on Oct 9, 2018, by Bill Angell, as Manager of Limestone Livestock, LLC, a New Mexico limited liability company.

(Seal, if any)

Notary Public

My Commission Expires:

OFFICIAL SEAL
David Pyeatt
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 12-5-19

LEA COUNTY, NM
KEITH MANES, COUNTY CLERK
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BY ANGIE BEAUCHAMP

LEA COUNTY, NM
KEITH MANES, COUNTY CLERK
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10/09/2018 04:11 PM
BY ANGIE BEAUCHAMP

EXHIBIT A

The Deeded Land

PARCEL ONE
Township 23 South, Range 34 East, N.M.P.M., Lea County, New Mexico
Section 10: W/2W/2
Section 11: E/2, W/2
Section 12: ALL
Section 13: NE/4NE/4
Section 14: W/2
Section 15: W/2
Section 23: NE/4SE/4
Section 34: SW/4SW/4, S/2SE/4, N/2, N/2SE/4, E/2SW/4
Section 35: ALL
Section 36: ALL

Township 23 South, Range 35 East, N.M.P.M., Lea County, New Mexico
Section 4: S/2
Section 7: Lots 1, 2, 3 and 4, E/2W/2 , E/2
Section 9: ALL
Section 16: ALL
Section 17: N/2N/2, S/2, S/2NE/4, S/2NW/4
Section 18: Lots 1, 2, 3 and 4, SE/4NW/4, NE/4SW/4, NW/4SE/4, SW/4NE/4, NE4/NW/4, N/2NE/4, SE/4NE/4, E/2SE/4, SW/4SE/4, SE/4SW/4
Section 19: S/2S/2
Section 20: W/2W/2, SE/4SW/4, S/2SE/4
Section 21: ALL
Section 28: ALL
Section 29: W/2W/2, NE/4NW/4, N/2NE/4
Section 30: N/2N/2
Section 31: Lots 1, 2, 3 and 4, SE/4SW/4, E/2NW/4, E/2, NE/4SW/4
Section 32: All
Section 33: All

PARCEL TWO
Township 22 South, Range 34 East, N.M.P.M.
Section 31: S/2S/2
Section 32: All
Section 33: S/2S/2
Section 34: W/2W/2
Section 35: S/2S/2, NE/4SE/4, E/2NE/4

Township 23 South, Range 33 East, N.M.P.M.
Section 1: Lot 3, SE/4NW/4, E/2SW/4
Section 12: S/2NW/4, N/2SW/4
Section 13: NW/4, S/2NE/4, N/2NE/4
Section 14: NE/4, S/2NW/4, N/2NW/4
Section 17: SE/4

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LEA COUNTY, NM
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BY ANGIE BEAUCHAMP

Township 23 South, Range 34 East, N.M.P.M.
Section 3: W/2NW/4, SW/4SW/4
Section 4: Lots 1, 2, 3, 4, S/2N/2, N/2SW/4, SE/4SW/4, W/2SE/4, SE/4SE/4
Section 5: Lot 1, SE/4NE/4, W/2NE/4, SE/4
Section 8: N/2
Section 16: All
Section 18: All
Section 21: S/2, N/2
Section 28: All
Section 29: All
Section 31: Lots 1, 2, 3, 4, E/2W/2 and E/2
Section 32: All
Section 33: SW/4SW/4, SW/4SE/4, N/2, N/2S/2, SE/4SW/4, SE/4SE/4

Township 23 South, Range 35 East, N.M.P.M.
Section 5: Lot 4, SW/4NW/4, NW/4SW/4, S/2S/2
Section 6: Lot 6, SW/4SW/4, E/2 SW/4, SE/4

US 5849615

EXHIBIT B

STATE ENGINEER WELL FILE NUMBERS

C 2581
C 3562
C 3563
C 3564
C 3582
C 3620

CP 614 POD 1
CP 872 POD 1
CP 1073 POD 1
CP 1074 POD 1
CP 1075 POD 1
CP 1099 POD 1
CP 1100 POD 1
CP 1120 POD 1
CP 1622 POD 1
CP-1705 POD 1
CP 1706 POD 1
CP-1708 POD 1
CP 1730 POD 1
CP 1740 POD 1

STATE ENGINEER APPROPRIATION & SUPPLEMENTAL WELL FILE NUMBERS

CP 614
CP 876
CP 1073
CP 1703 POD 2
CP 1074
CP 1704 POD 2
CP 1075
CP 1099
CP 1100
CP 1622
CP 1686
CP 1706
CP-1709
CP 1729
CP 1730
CP 1740

US 5849615

John R. D Antonio, Jr., P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 642063
File Nbr: C 03582

Mar. 21, 2019

JOHN LANGDON
LIMESTONE BASIN PROPERTIES RANCH, LLC
3300 NORTH A ST
BUILDING 1 STE 220
MIDLAND, TX 79705

Greetings:

Enclosed is one original copy of a Change of Ownership of a Water Right submitted to this office for filing. This Change of Ownership is accepted for filing in accordance with Section 72-1-2.1, NMSA 1978 (1996 Supp.), effective May 15, 1996. The acceptance by the State Engineer Office does not constitute validation of the right claimed.

According to Section 72-1-2.1, NMSA 1978 (1996 Supp.), you must record this Change of Ownership with the clerk of the county in which the water is located. The filing shall be public notice of the existence and contents of the instruments so recorded.

Sincerely,

Maret Amaral
(575)622-6521

Enclosure

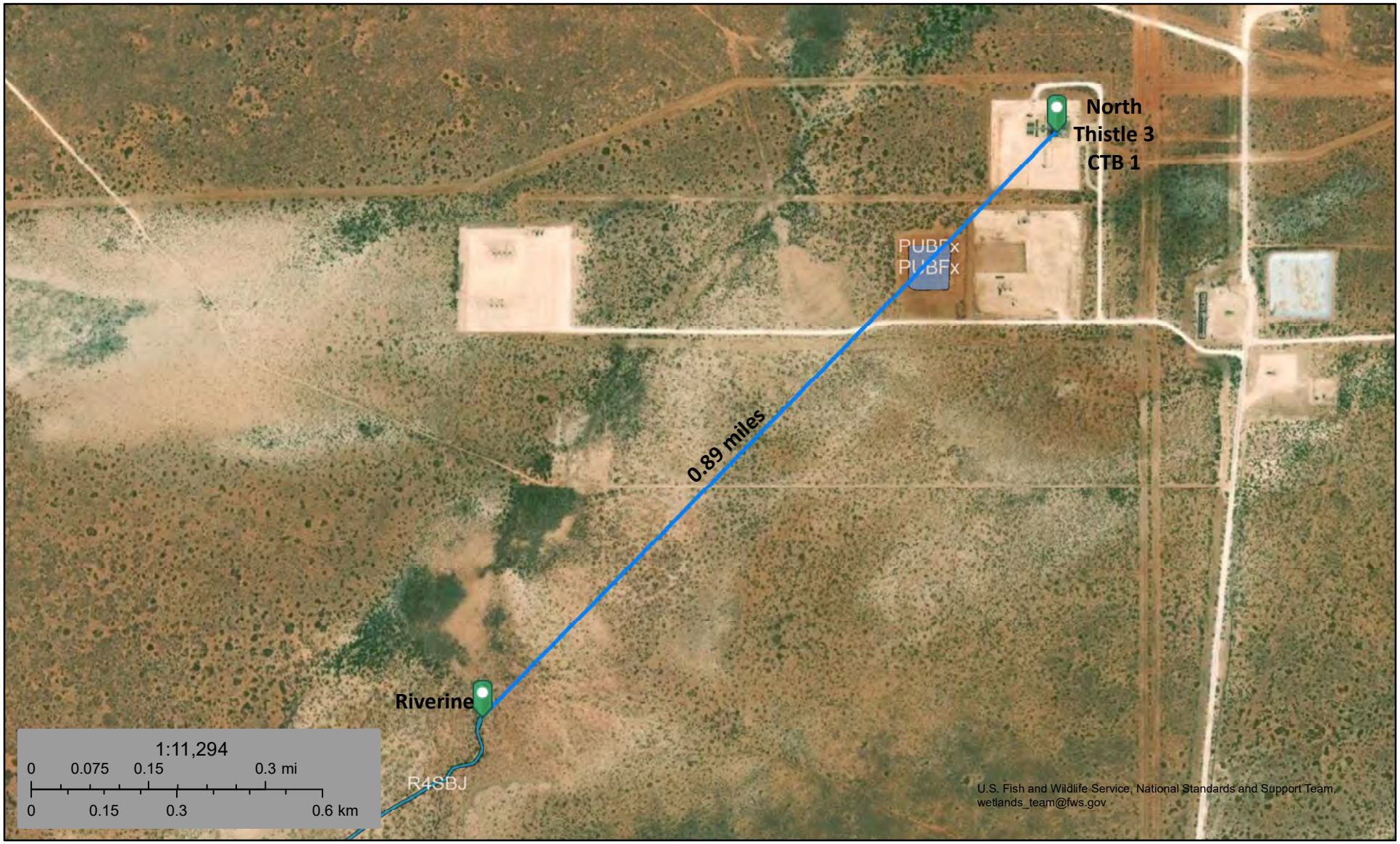
chngowrc

U.S. Fish and Wildlife Service
National Wetlands Inventory

North Thistle 3 CTB 1

Nearest Significant Watercourse: Riverine

Distance: 0.89 miles



January 27, 2026

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.

U.S. Fish and Wildlife Service
National Wetlands Inventory

North Thistle 3 CTB 1

Nearest Playa/Wetlands: Freshwater Pond
Distance: 1.63 miles

January 27, 2026

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

North Thistle 3 CTB 1

Nearest Residence: 4.55 miles

Legend

- Distance to Residence
- North Thistle 3 CTB 1

North Thistle 3 CTB 1

4.55 miles

Zoom in of Distance to Residence

BEBIDAS 16 STATE SWD 001

Residence

Residence

Delaware Basin Rd

Delaware Basin Rd

Greenclean

Google Earth

Image © 2025 Airbus

N

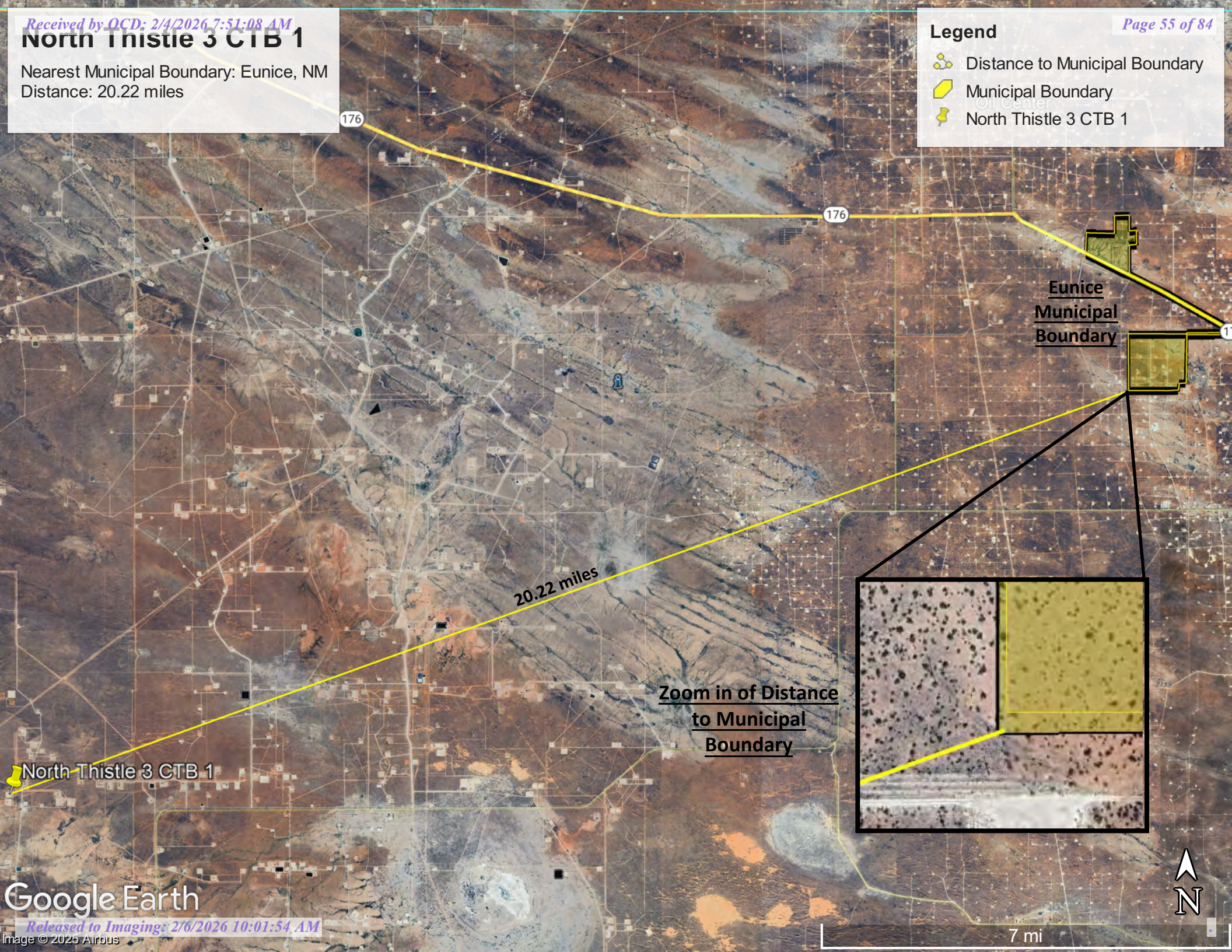
2 mi

North Thistle 3 CTB 1

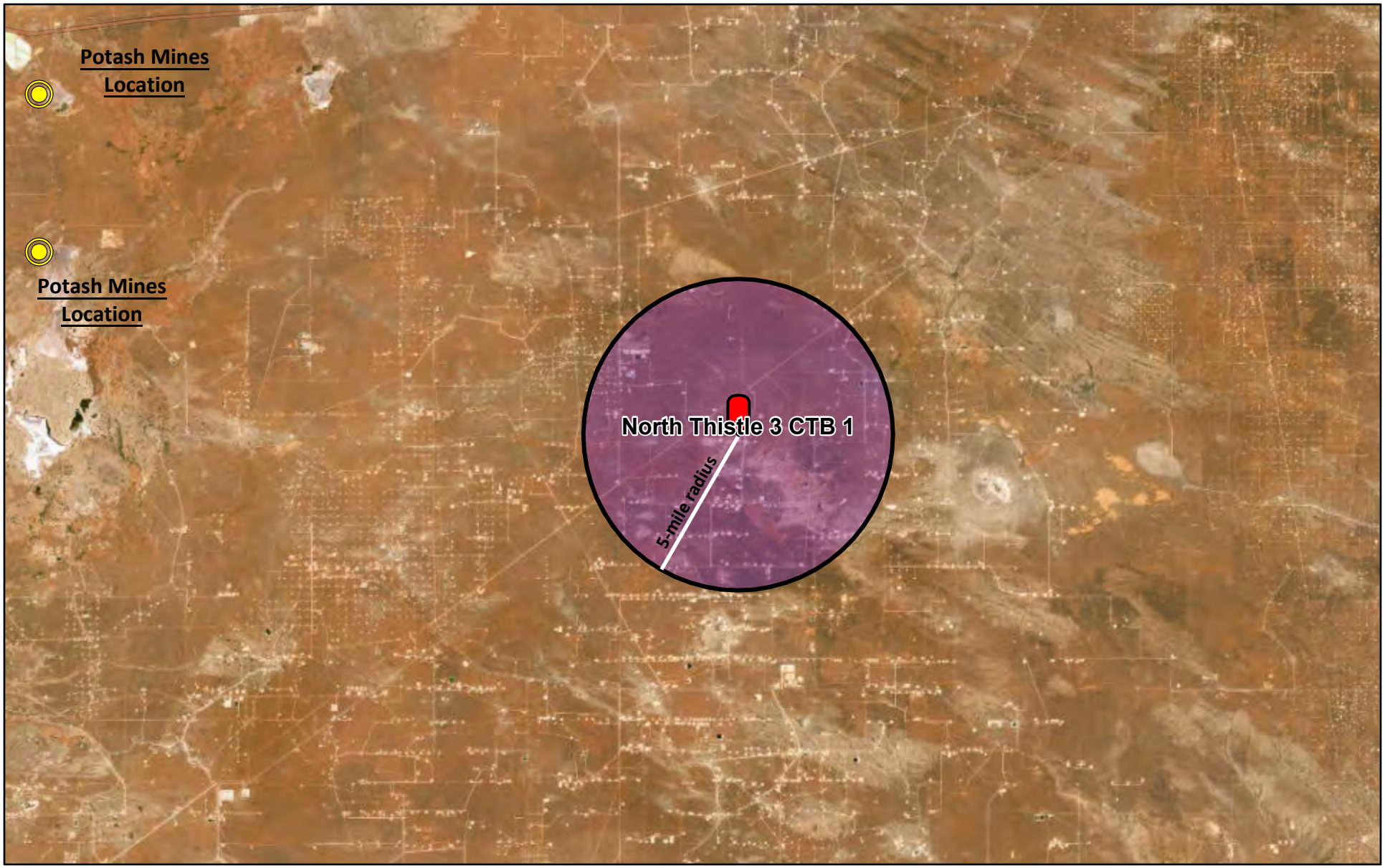
Nearest Municipal Boundary: Eunice, NM
Distance: 20.22 miles

Legend

- Distance to Municipal Boundary
- Municipal Boundary
- North Thistle 3 CTB 1



North Thistle 3 CTB 1 Mines Proximity Map



10/30/2025

Mining Facilities 2024, NMED

World Imagery

The mapped buffer represents an approximate 5-mile radius around the Site.

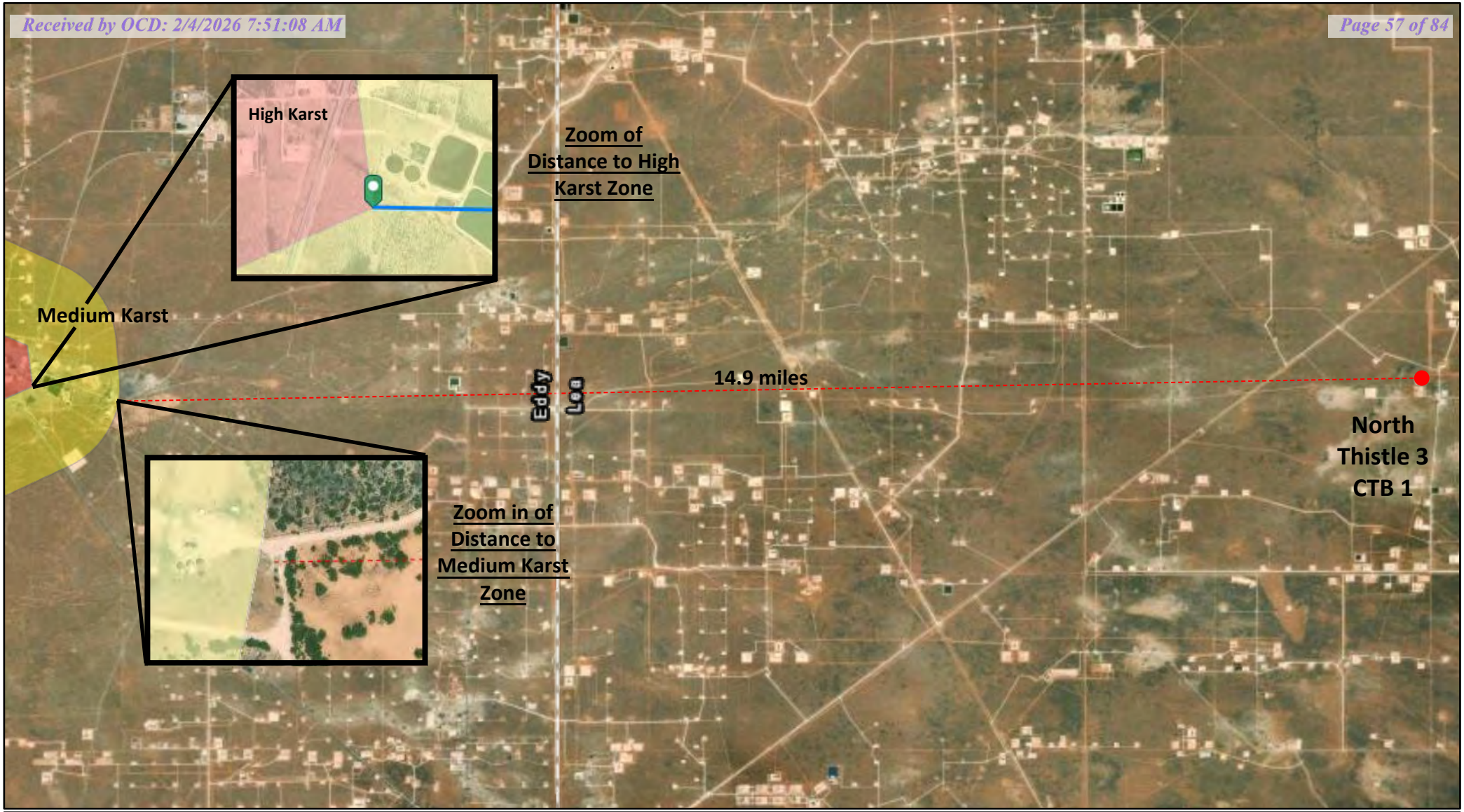
1:335,571

0 2.25 4.5 9 mi

0 3.75 7.5 15 km

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

Monica Peppin



North Thistle 3 CTB 1

0 0.5 1 2 mi

N

New Mexico State Land Office

Disclaimer:
The New Mexico State Land Office assumes no responsibility or liability for, or in connection with the accuracy, reliability or use of the information provided herein with respect to State Land Office data or data from other sources.

Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico.

Map Created: 10/30/2025

User drawn lines

User drawn points

Karst_Potential_NM

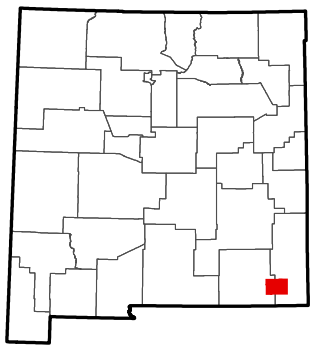
Potential

Critical

High

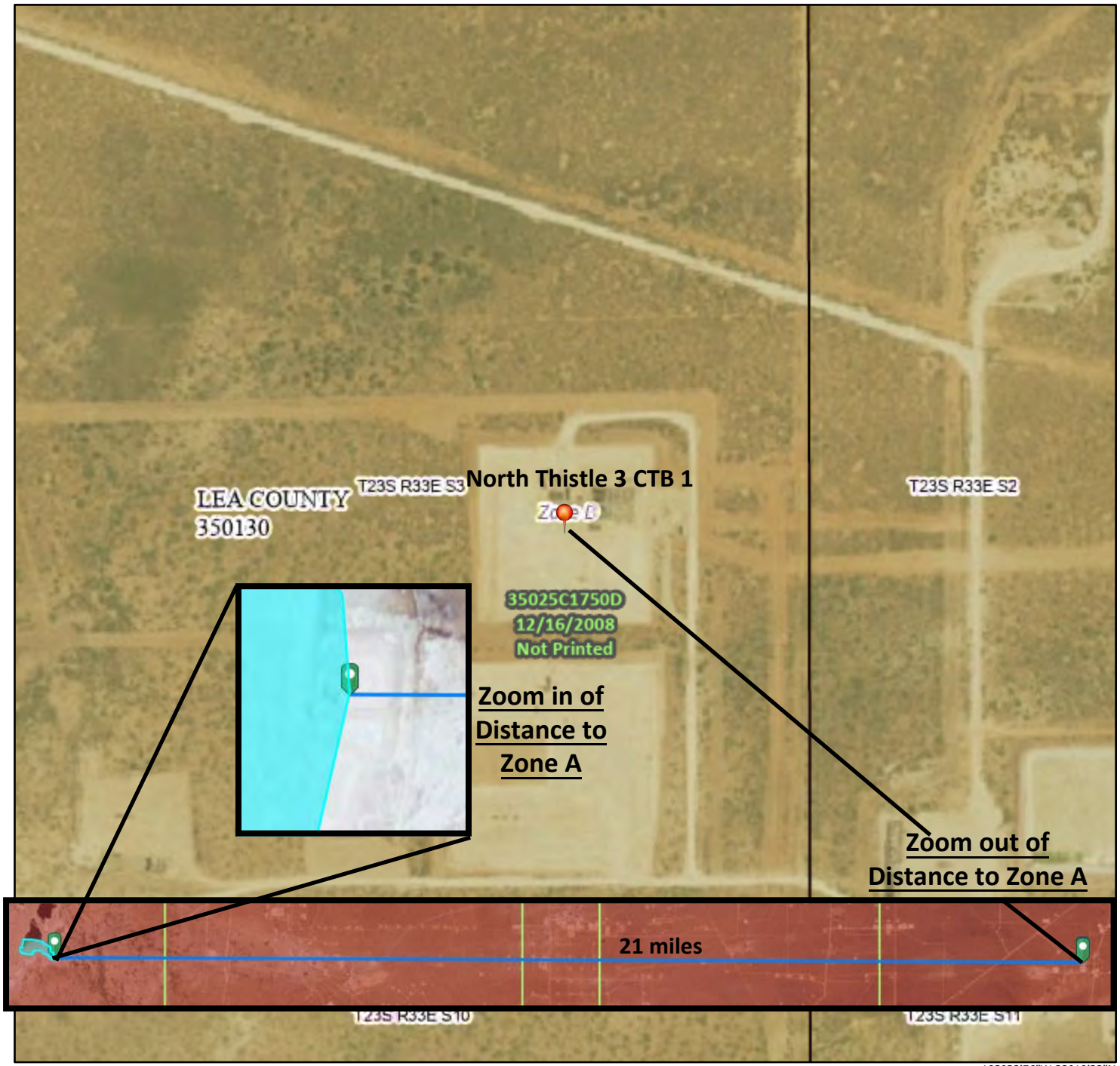
Medium

Karst Potential
None
Nearest Karst Feature
Medium
Distance to nearest Karst Feature
14.9 miles
Distance to High Karst Feature
15.9 miles



National Flood Hazard Layer FIRMette & Distance to Flood Zone A

103°33'33"W 32°20'2"N



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

1:6,000

103°32'56"W 32°19'32"N

Basemap Imagery Source: USGS National Map 2023

Legend

FEMA

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 / 17.5 Cross Sections with 1% Annual Chance / 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 11/2/2025 at 8:02 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.

Soil Map—Lea County, New Mexico
(North Thistle 3 CTB 1)

Map Scale: 1:1,550 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

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: Lea County, New Mexico
Survey Area Data: Version 22, Sep 9, 2025

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
KD	Kermit-Palomas fine sands, 0 to 12 percent slopes	9.0	100.0%
Totals for Area of Interest		**9.0**	**100.0%**

Lea County, New Mexico

KD—Kermit-Palomas fine sands, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: dmpv
Elevation: 3,000 to 4,400 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

Kermit and similar soils: 70 percent
Palomas and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kermit

Setting

Landform: Dunes
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex
Parent material: Calcareous sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sand
C - 8 to 60 inches: fine sand

Properties and qualities

Slope: 3 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

Description of Palomas

Setting

Landform: Dunes
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex
Parent material: Alluvium derived from sandstone

Typical profile

A - 0 to 16 inches: fine sand
Bt - 16 to 60 inches: sandy clay loam
Bk - 60 to 66 inches: sandy loam

Properties and qualities

Slope: 0 to 5 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: 50 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: Moderate (about 7.5 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

Minor Components

Pyote

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

Maljamar

Percent of map unit: 4 percent

Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Palomas

Percent of map unit: 1 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Dune land

Percent of map unit: 1 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 22, Sep 9, 2025

USDA Natural Resources Conservation Service

Ecological site R070BD005NM
Deep Sand

Accessed: 11/23/2025

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.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on terraces, Piedmonts, dunes fields, or upland plains. Parent material consists of eolian deposits and alluvium derived from sandstone. Slopes range from 0 to 15 percent, usually less than 5 percent. Low, stabilized hummocks or dunes frequently occur. Elevations range from 2,842 to 4,500 feet.

Table 2. Representative physiographic features

Landforms	(1) Dune (2) Parna dune (3) Terrace
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–4,500 ft
Slope	15%
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 is in late March or early April, and the first killing frost is in late October or early November.

Both temperature and moisture favor warm season perennial plant growth. During years of abundant winter and early spring moisture, cool season growth and annual forbs, make up an important component of this site. Strong winds blow from the west from January through June, which accelerates soil drying during a critical period for cool season plant growth.

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

Table 3. Representative climatic features

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

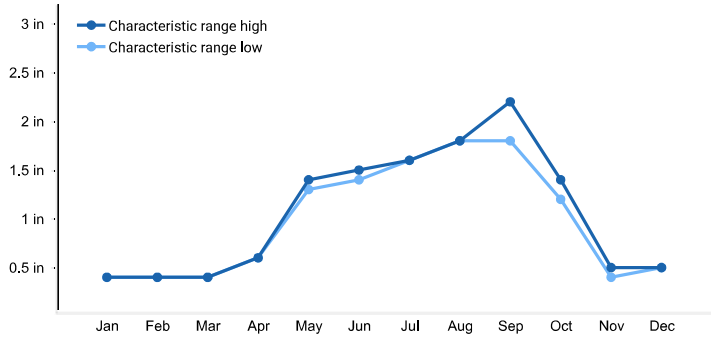


Figure 2. Monthly precipitation range

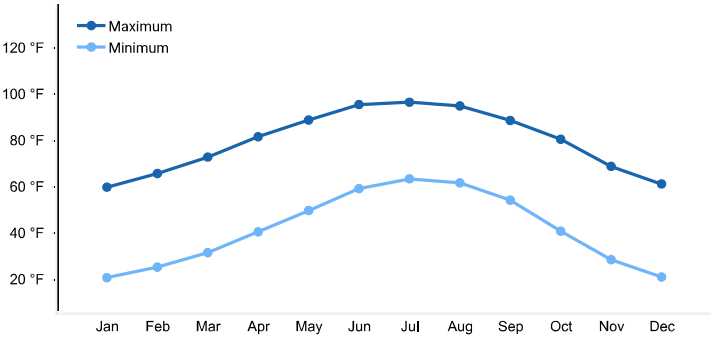


Figure 3. Monthly average minimum and maximum temperature

Influencing water features

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

Soil features

Soils are deep or very deep. Surface textures are sand loam, fine sand or loamy fine sand, Underlying material textures are loamy fine sand, fine sand, sand or fine sandy loam. Because of the coarse textures and rapid drying of the surface, the soil, if unprotected by plant cover and organic residue, becomes windblown and low hummocks or dunes are formed around shrubs.

Characteristic soils are:
Anthony
Aguena
Kermit
Likes
Pintura
Bluepoint

Table 4. Representative soil features

Surface texture	(1) Sand (2) Fine sand (3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to excessively drained
Permeability class	Moderate to very rapid
Soil depth	60–72 in
Surface fragment cover <=3"	5%
Surface fragment cover >3"	Not specified
Available water capacity (0-40in)	3–5 in
Calcium carbonate equivalent (0-40in)	5–15%
Electrical conductivity (0-40in)	4 mmhos/cm
Sodium adsorption ratio (0-40in)	2
Soil reaction (1:1 water) (0-40in)	6.6–7.8
Subsurface fragment volume <=3" (Depth not specified)	5–10%
Subsurface fragment volume >3" (Depth not specified)	Not specified

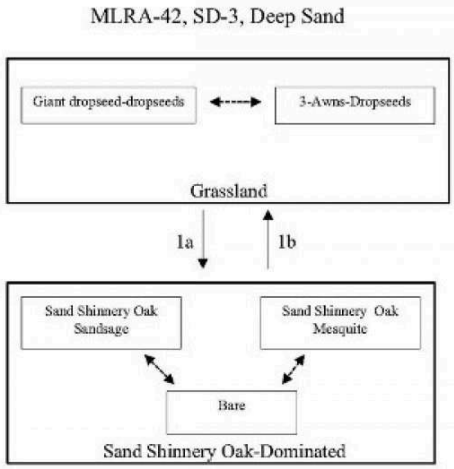
Ecological dynamics

Overview

The Deep Sand site occurs adjacent to and/or intergraded with the Sandhills and Sandy sites (SD-3). The Deep Sand site can be distinguished by slopes less than eight percent (approximately five percent) and textural changes at depths greater than 40 inches. The Deep Sand site has well drained soils with a surface texture of sand or loamy fine sand. The Sandhills site has slopes greater than eight percent and textural depths greater than 60 inches. Conversely, the Sandy site has slopes less than five percent and depths to textural change commonly around 20 inches. The historic plant community of the Deep Sand site is dominated primarily by giant dropseed (*Sporobolus giganteus*) and other dropseeds (*S. flexuosus*, *S. contractus*, *S. cryptandrus*), with scattered shinnery oak (*Quercus havardii*) and soapweed yucca (*Yucca glauca*). Other herbaceous species include threeawns (Aristida spp.), bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), and annual and perennial forbs distributed relative to precipitation occurrences. Bare ground and litter compose a significant proportion of ground cover while grasses are the remainder. Shinnery oak will increase with an associated decrease in dropseed and bluestem abundance possibly due to climatic change, fire suppression, interspecific competition, and excessive grazing. Continued grass cover loss may result in a transition to a shinnery oak dominated state with increases in sand sage (*Artemisia filifolia*) and honey mesquite (*Prosopis glandulosa*). However, brush management may restore the grassland component and reverse the shinnery oak state back toward the historic plant community.

State and transition model

Plant Communities and Transitional Pathways (diagram)



1.a Climate, fire suppression, competition, over grazing

1.b Brush control, Prescribed grazing

State 1
Historic Climax Plant Community

Community 1.1
Historic Climax Plant Community

State Containing Historic Plant Community Grassland: The historic plant community is dominated by giant dropseed, other dropseeds, threeawns, and bluestems. Dominant woody plants include shinnery oak and soapweed yucca. Forb abundance and distribution varies and is dependent on annual rainfall. The Deep Sand site typically exists in sandy plains and dunes (Sosebee 1983). Grass dominance stabilizes the potentially erosive sandy soils. Historical fire suppression, however, may have contributed to increased woody plant abundance, which has reduced grass species. Further, drought conditions compounded with excessive grazing likely has driven most grass species out of competition with shrubs which has resulted in a shinnery oak dominated state with sand sage and mesquite (Young et al. 1948). Diagnosis: Grassland dominated by dropseeds, threeawns, and bluestems. Small shrubs, such as shinnery oak and soapweed yucca, and subshrubs are dispersed throughout the grassland. Other grasses that could appear on this site would include: flatsedge, almejita signalgrass, big bluestem, Indiangrass, fall witchgrass, hairy grama and red lovegrass Other shrubs include: fourwing saltbush, mesquite, ephedra and broom snakeweed. Other forbs include: wooly and scarlet gaura, wooly dalea, phlox heliotrope, scorpionweed, deerstongue, fleabane, nama, hoffmanseggia, lemon beebalm and stickleaf.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	396	858	1320
Shrub/Vine	108	234	360
Forb	96	208	320
Total	**600**	**1300**	**2000**

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	15-20%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	35-40%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	35-40%

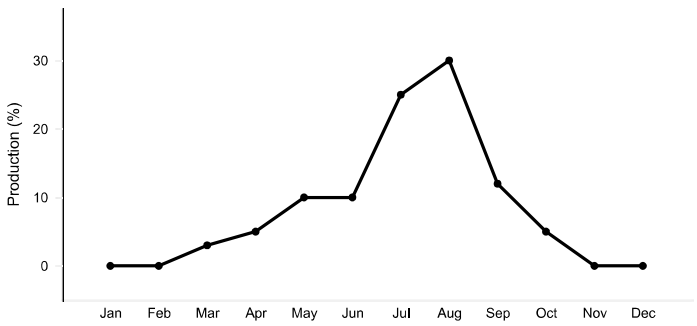


Figure 5. Plant community growth curve (percent production by month). NM2805, HCPC. SD-3 Deep Sand - Warm season plant community .

State 2
Shinnery Oak Dominated

Community 2.1
Shinnery Oak Dominated

Shinnery Oak Dominated: This state is dominated by shinnery oak with subdominants of sand sage or mesquite. Bare ground is a significant component in this state as well. shinnery oak is characterized by dense stands in sandy soils; however, as clay percentage increases, shinnery oak decreases. Shinnery oak abundance and distribution increase with disturbances, such as excessive grazing and fire, due to an aggressive rhizome system. As shinnery oak abundance increases, an associated increase of mesquite, sand sage, and soapweed yucca also occurs. Shinnery oak's extensive root system allows the oak to competitively exclude grasses and forbs. Sand sage, however, stabilizes light sandy soils from wind erosion and can co-exist with herbaceous species by protecting them in heavily grazed conditions (Davis and Bonham 1979). Shinnery oak has been found primarily in very deep, excessively drained, and rapidly permeable soils. Shinnery oak is associated with landforms which are gently undulating to rolling uplands, very gently sloping to moderately steep slopes, and upland plains, alluvial fans and valley sideslopes. Shinnery oak and sand sage can be controlled with herbicide if applied in the spring with a subsequent rest from grazing (Herbel et al. 1979, Pettit 1986). In addition, repetitive seasons of goat browsing can also reduce shinnery oak abundance. Patches should be maintained during brush control, however, to prevent erosion and to provide wildlife cover and forage. Further, as shinnery oak and other shrubs increase, bare patches and erosion will increase due to a lack of herbaceous ground cover. Diagnosis: Shinnery oak dominated with subdominant sand sage, honey mesquite, and soapweed yucca with increasing frequency and size of bare patches. Transition to Shinnery oak dominated state (1a): The historic plant community begins to shift toward

the shinnery oak dominated state as drivers such as climate change, 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 an increase of shrub species abundance and bare patch expansion. Key indicators of approach to transition: • Loss of grass and forb cover • Surface soil erosion • Bare patch expansion • Increased shrub species abundance and composition Transition to Historic Plant Community (1b): The shinnery oak dominated state may transition back toward the historic plant community as new drivers are introduced such as prescribed grazing, brush control, and discontinued drought conditions.

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**			450–585	
	spike dropseed	SPCO4	*Sporobolus contractus*	450–585	–
	sand dropseed	SPCR	*Sporobolus cryptandrus*	450–585	–
	mesa dropseed	SPFL2	*Sporobolus flexuosus*	450–585	–
	giant dropseed	SPGI	*Sporobolus giganteus*	450–585	–
2	**Warm Season**			65–104	
	sand bluestem	ANHA	*Andropogon hallii*	65–104	–
	little bluestem	SCSC	*Schizachyrium scoparium*	65–104	–
3	**Warm Season**			39–91	
	threeawn	ARIST	*Aristida*	39–91	–
4	**Warm Season**			13–39	
	thin paspalum	PASE5	*Paspalum setaceum*	13–39	–
5	**Warm Season**			13–39	
	black grama	BOER4	*Bouteloua eriopoda*	13–39	–
6	**Warm Season**			13–39	
	mat sandbur	CELO3	*Cenchrus longispinus*	13–39	–
7	**Warm Season**			13–39	
	Havard's panicgrass	PAHA2	*Panicum havardii*	13–39	–
8	**Warm Season**			13–65	
	plains bristlegrass	SEVU2	*Setaria vulpiseta*	13–65	–
9	**Other Annual Grasses**			13–65	
	Grass, annual	2GA	*Grass, annual*	13–65	–
Shrub/Vine					
10	**Shrub**			65–130	
	Havard oak	QUHA3	*Quercus havardii*	65–130	–
11	**Shrub**			13–39	
	sand sagebrush	ARFI2	*Artemisia filifolia*	13–39	–
12	**Shrub**			65–130	
	yucca	YUCCA	*Yucca*	65–130	–
13	**Shrub**			13–39	
	rabbitbrush	CHRYS9	*Chrysothamnus*	13–39	–
14	**Other Shrubs**			13–39	
	Shrub (>.5m)	2SHRUB	*Shrub (>.5m)*	13–39	–
Forb					
15	**Forb**			39–91	
	croton	CROTO	*Croton*	39–91	–
	Indian blanket	GAPU	*Gaillardia pulchella*	39–91	–
16	**Forb**			39–91	
	aster	ASTER	*Aster*	39–91	–
	whitest evening primrose	OEAL	*Oenothera albicaulis*	39–91	–

	beardtongue	PENST	*Penstemon*	39–91	–
17	**Forb**			39–91	
	touristplant	DIWI2	*Dimorphocarpa wislizeni*	39–91	–
	buckwheat	ERIOG	*Eriogonum*	39–91	–
	sunflower	HELIA3	*Helianthus*	39–91	–
	spiny false fiddleleaf	HYSP	*Hydrolea spinosa*	39–91	–
	threadleaf ragwort	SEFLF	*Senecio flaccidus var. flaccidus*	39–91	–
18	**Other Forbs**			13–65	
	Forb (herbaceous, not grass nor grass-like)	2FORB	*Forb (herbaceous, not grass nor grass-like)*	13–65	–

Animal community

This site provides habitat which supports a resident animal population characterized by pronghorn, antelope, black-tailed jackrabbit, spotted ground squirrel, Ord's kangaroo rat, northern grasshopper mouse, southern plains woodrat, badger, meadowlark, roadrunner, white-necked raven, cactus wren, lesser prairie chicken, morning dove, scaled quail, Harris hawk, side blotched lizard, marbled whiptail, Texas horned lizard, western diamondback rattlesnake and ornate box turtle. In the area called Mescalero Sands, there are white-tailed and mule deer.

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
Anthony B
Bluepoint A
Kermit A
Aguena A
Likes A
Pintura A

Recreational uses

This site offers limited recreation potential for hiking, horseback riding, nature observation and photography; game bird, predator, antelope, and deer hunting.

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 during all seasons of the year. Shinnery oak is toxic in the late bud or early leaf stage. Shinnery oak will increase, as will sand sagebrush following drought. Changes in the fire return interval have also favored an increase in shrub cover. The dropseeds and bluestem will decrease. This site responds very well to brush manangement and deferment. This site is well suited to a grazing system that rotates the season of use. Nesting habitat for lesser prairie chicken can be improved by providing residual cover that is at least 14 inches high.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM
100 - 76 2.0 – 3.8
75 – 51 3.0 – 6.0
50 – 26 5.0 – 10.0
25 – 0 10.1 +

North Thistle 3 CTB 1 - Geological Unit Map

10/30/2025

Map boundary

Geologic units

Q

World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations

1:14,795

0 0.1 0.2 0.4 mi

0 0.15 0.3 0.6 km

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

Monica Peppin

APPENDIX C

CORRESPONDENCE

Outlook

RE: [EXTERNAL] nAPP2528041022 North Thistle 3 CTB 1 Liner Inspection Notification

From Raley, Jim <Jim.Raley@dvn.com>
Date Tue 2025-11-04 2:49 PM
To Monica Peppin <Monica.Peppin@kljeng.com>
Cc Will Harmon <will.harmon@kljeng.com>

Submitted 11/04

Jim Raley | Environmental Professional - Permian Basin
5315 Buena Vista Dr., Carlsbad, NM 88220
C: (575)689-7597 | jim.raley@dvn.com

devon

From: Monica Peppin <Monica.Peppin@kljeng.com>
Sent: Tuesday, November 4, 2025 2:34 PM
To: Raley, Jim <Jim.Raley@dvn.com>
Cc: Will Harmon <will.harmon@kljeng.com>
Subject: [EXTERNAL] nAPP2528041022 North Thistle 3 CTB 1 Liner Inspection Notification

Jim,

Below is the liner notice for North Thistle. Let me know if there is any conflict and need to change the time or date.

Liner Inspection	
What is the liner inspection surface area in square feet	3456
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	11/7/2025
Time liner inspection will commence	1000AM
Please provide any information necessary for observers to liner inspection	Monica Peppin 575.909.3418
Please provide any information necessary for navigation to liner inspection site	32.329904, -103.553590
Incident	nAPP2528041022

Thank you!
Monica

Monica Peppin, A.S.
Environmental Specialist II
KLJ
575-213-9010 Direct
575-909-3418 Cell
Carlsbad, NM 88220
kljeng.com

Book time to meet with me

Outlook

(Extension Approval) - NAPP252801022 North Thistle 3 CTB 1 Liner Inspection Extension Request

From Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Date Mon 2026-01-05 8:25 AM
To Monica Peppin <Monica.Peppin@kljeng.com>
Cc Raley, Jim <jim.raley@dvn.com>; Will Harmon <will.harmon@kljeng.com>; Bob Raup <Bob.Raup@kljeng.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

RE: Incident **#NAPP2528041022 NORTH THISTLE 3 CTB 1**

Monica,

A 60-day extension is approved. Please have a remediation closure report uploaded to the OCD Permitting Portal no later than **March 2nd, 2026**. Include this e-mail correspondence in the 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: Friday, January 2, 2026 8:48 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] nAPP252801022 North Thistle 3 CTB 1 Liner Inspection Extension Request

From: Monica Peppin <Monica.Peppin@kljeng.com>
Sent: Thursday, January 1, 2026 6:13 PM
To: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; spills@nmslo.gov
Cc: Raley, Jim <jim.raley@dvn.com>; Will Harmon <will.harmon@kljeng.com>; Bob Raup <Bob.Raup@kljeng.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: Re: [EXTERNAL] nAPP252801022 North Thistle 3 CTB 1 Liner Inspection Extension Request

Shelly,

Apologies for the delay in response, here is the incident number nAPP2528041022.

Please let me know if you need anything else.

Thank you,
Monica

Get Outlook for iOS

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Wednesday, December 31, 2025 3:51:32 PM
To: Monica Peppin <Monica.Peppin@kljeng.com>; spills@nmslo.gov <spills@nmslo.gov>
Cc: Raley, Jim <jim.raley@dvn.com>; Will Harmon <will.harmon@kljeng.com>; Bob Raup <Bob.Raup@kljeng.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] nAPP252801022 North Thistle 3 CTB 1 Liner Inspection Extension Request

> **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.

Hi Monica,

I believe the incident number you provided in your email request is missing a number as all current OCD incident numbers contain 10 digits. Please send me the incident number for which you are requesting the extension so it may be forwarded to the appropriate reviewer.

Happy New Year,

Shelly

Shelly Wells * Senior Environmental Scientist
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: Monica Peppin <Monica.Peppin@kljeng.com>
Sent: Wednesday, December 31, 2025 3:30 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; spills@nmslo.gov
Cc: Raley, Jim <jim.raley@dvn.com>; Will Harmon <will.harmon@kljeng.com>; Bob Raup <Bob.Raup@kljeng.com>
Subject: [EXTERNAL] nAPP252801022 North Thistle 3 CTB 1 Liner Inspection Extension Request

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To whom it may concern,

On behalf of Devon Energy, we are respectfully requesting a 60-day extension for the liner inspection related to the referenced spill (nAPP252801022). The original due date is January 1, 2026. An additional two releases have occurred within the containment since then, and the liner has not yet been pressure washed.
Cleanup is actively being coordinated, and the inspection will be scheduled promptly once the liner is adequately cleaned. This additional time will allow for the cleaning, scheduling, completion of inspection, and reporting of the incidents.

Thank you,

Monica

Monica Peppin, A.S.
Environmental Specialist II
KLJ
575-213-9010 Direct
575-909-3418 Cell
Carlsbad, NM 88220
kljeng.com

Book time to meet with me

Outlook

RE: [EXTERNAL] North Thistle 3 CTB 1 Liner Inspection Notification nAPP2528041022/nAPP2532836691/nAPP2533532699

From Raley, Jim <Jim.Raley@dvn.com>
Date Wed 2026-01-07 11:15 AM
To Monica Peppin <Monica.Peppin@kljeng.com>
Cc Will Harmon <will.harmon@kljeng.com>; Bob Raup <Bob.Raup@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 1/7

Jim Raley | Environmental Professional - Permian Basin
5315 Buena Vista Dr., Carlsbad, NM 88220
C: (575)689-7597 | jim.raley@dvn.com

devon

From: Monica Peppin <Monica.Peppin@kljeng.com>
Sent: Wednesday, January 7, 2026 10:59 AM
To: Raley, Jim <Jim.Raley@dvn.com>
Cc: Will Harmon <will.harmon@kljeng.com>; SLO Spills <spills@nmslo.gov>; Bob Raup <Bob.Raup@kljeng.com>
Subject: [EXTERNAL] North Thistle 3 CTB 1 Liner Inspection Notification nAPP2528041022/nAPP2532836691/nAPP2533532699

Jim,

Please see the below liner inspection notification for the three incidents at North Thistle 3 CTB 1 so that it can be submitted to the NMOCD online portal.

Let me know if there are any changes to the time and date needed.

Liner Inspection	
What is the liner inspection surface area in square feet	12,089
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	1/9/2026
Time liner inspection will commence	0200PM
Please provide any information necessary for observers to liner inspection	Monica Peppin 575.909.3418
Please provide any information necessary for navigation to liner inspection site	32.329904, -103.553590

Incident

nAPP2528041022
nAPP2532836691
nAPP2533532699

Thank you,
Monica

Monica Peppin, A.S.
Environmental Specialist II
KLJ
575-213-9010 Direct
575-909-3418 Cell
Carlsbad, NM 88220
kljeng.com

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General Information
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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 549974

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 549974
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2532836691**
Incident Name	**NAPP2532836691 NORTH THISTLE 3 CTB 1 @ FAPP2130622273**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**
Incident Facility	**[fAPP2130622273] NORTH THISTLE 3 CTB 1**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	NORTH THISTLE 3 CTB 1
Date Release Discovered	11/22/2025
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: Equipment Failure | Pump | Produced Water | Released: 50 BBL | Recovered: 50 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)	Connection failure allowed fluids to lined containment. Major Notification email sent to (M.Bratcher, R. Romero) on 11/23/2025

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QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 549974
	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@dvn.com Date: 02/04/2026

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QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 549974
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (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	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 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	None
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	
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	Yes
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	01/09/2026
On what date will (or did) the final sampling or liner inspection occur	01/09/2026
On what date will (or was) the remediation complete(d)	01/09/2026
What is the estimated surface area (in square feet) that will be remediated	12089
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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Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 549974
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
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.*
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: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 02/04/2026
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 549974
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Liner Inspection Information	
Last liner inspection notification (C-141L) recorded	**541017**
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	**01/09/2026**
Was all the impacted materials removed from the liner	**Yes**
What was the liner inspection surface area in square feet	**12089**

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	12089
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@dvn.com Date: 02/04/2026

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

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CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 549974
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Liner inspection approved, release resolved. Restoration complete.	2/6/2026