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March 10, 2026

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

SUBJECT: Liner Inspection and Closure Report for Horn 22-27-34 Federal Com #412H/East Pad –  
February 25, 2026 Site Visit

Incident IDs: nAPP2534540759/nAPP2535875277/nAPP2602732510

Well API Number: 30-015-54659

Facility ID (Name): fAPP2332566148 (HORN 22-27-34 Federal Com #412H/East Pad)

Facility Location: Unit P of Section 15, Township 26 South, Range 29 East, Eddy County, New Mexico

Facility GPS Coordinates: 32.03797, -103.966386

### **Introduction**

KLJ Engineering (KLJ) has prepared this report on behalf of Devon Energy Production Company, LP (Devon) to detail the recent liner inspection conducted at the Horn 22-27-34 Federal Com #412H/East Pad (Site) on February 25, 2026. The inspection followed the releases of produced water that occurred on December 6, 2025 (Incident ID: nAPP2534540759), December 20, 2025 (Incident ID: nAPP2535875277), and January 26, 2026 (Incident ID: nAPP2602732510).

### **Site Information and Background**

The Site is located approximately 18 miles south of Loving, New Mexico, on Bureau of Land Management (BLM) property. The Site lies within Unit P, Section 15, Township 26 South, Range 29 East, in Eddy County. KLJ conducted a liner inspection and associated site characterization in accordance with 19.15.29.11 and 19.15.29.12 of the New Mexico Administrative Code (NMAC) to assess the integrity of the containment system and evaluate any potential environmental impacts resulting from a release.

### **Release Descriptions and Immediate Response**

#### **INCIDENT ID NAPP2534540759**

On December 6, 2025, a Devon lease operator discovered a pinhole leak on the suction line of the water transfer pump located within the secondary containment, resulting in the release of approximately 75 barrels (bbls) of produced water. On December 11, 2025, Devon Energy submitted the initial Notice of Release (NOR) to the New Mexico Energy, Minerals, and Natural Resources Department – Oil Conservation Division (NMOCD) via the Operator’s Electronic Permitting and Payment Portal. Subsequently, a Form C-141 was submitted on December 17, 2025.

#### **INCIDENT ID NAPP2535875277**

On December 20, 2025, a Devon lease operator discovered a ball valve developed a pinhole leak located within the secondary containment, resulting in the release of approximately 30 bbls of produced water. The NOR for this release was submitted on December 24, 2025, followed by the submission of Form C-141 on December 24, 2025.

The incidents that occurred on December 6 and December 20, 2025, resulted in the release of fluids exceeding 25 bbls and therefore classified as major *releases* under 19.15.29.7(A)(1) NMAC, requiring

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enhanced notification procedures. In compliance with 19.15.29.10(A) NMAC, Devon provided verbal and email notification to the NMOCD Environmental Bureau Chief and the appropriate Division District Office within 24 hours of discovery. Pursuant to 19.15.29.9(A)(1) and 19.15.29.10(A)(1)(2) NMAC, Form C-141 submissions for each incident confirmed initial notifications and included updated release details, thereby fulfilling the reporting obligations for major release reporting.

#### **INCIDENT ID NAPP2602732510**

On January 26, 2026, a Devon lease operator discovered that a dump line had developed a pinhole leak, resulting in the release of approximately 5 bbls of produced water into secondary containment. The NOR for this release was submitted on January 27, 2026, followed by the submission of Form C-141 on January 29, 2026.

#### **Site Characterization Summary**

The Site lies within the Quaternary (Qoa) mixed calcareous eolian deposits derived from sedimentary rock. Terrain for the Site and immediate surrounding area includes knolls, ridges, hillslopes, alluvial fans and escarpments with slopes ranging from 0 to 25 percent and averaging about 7 percent. Elevations range from 2,842 to 4,500 feet above mean sea level (amsl). Soil features within the Site are shallow to very shallow with an average of 6 to 14 inches of average annual precipitation. Soil within the Site tends to be well-drained, with high runoff potential and very low water-holding capacity.

The USDA – Web Soil Survey (WSS) identifies the predominant soil type at the Site as the Upton-Simona complex with surface layers being very cobbly loam, very gravelly loam, gravelly loam, cobbly loam, gravelly fine loam, sandy loam, or gravelly sandy loam. An indurated caliche layer or limestone bedrock layer occurs within 20 inches, averaging less than 10 inches, that may be the restrictive layer.

Vegetation reflects a grassland/shrub mix background dominated by black grama with sideoats grama commonly present as the sub-dominant species. Additional native grasses occurring within the community include blue grama, hairy grama, bush muhly, and sand dropseed. Retrogression may be experienced during extended drought or overgrazing conditions. These disturbances can result in a decline of preferred perennial grasses such as black grama, sideoats grama, blue grama, and bush muhly. Threewawns may increase when these species decrease and become the dominant species.

No surface water features were identified within 300 feet of the Site. The nearest significant watercourse and mapped wetland is 0.11 miles northwest; the closest playa is 0.12 miles northwest (USFWS NWI, 2025). These distances comply with the requirements of 19.15.29.12(C)(4) NMAC.

Per the New Mexico Office of the State Engineer (NMOSE) Points of Diversion (POD) Map, the nearest POD is C-04630-POD1, which is used to reference Depth to Groundwater (DTGW) and is located 1.24 miles southwest of the Site. The POD is identified as a monitoring well used to determine DTGW. Well records indicate that the temporary borehole was drilled to a depth of 55 ft bgs, and no groundwater was encountered. The nearest water source, a domestic well used for stock watering purposes, is C-01569, located 0.74 miles southwest of the Site. The well record indicates that there is no recorded depth of the well.

Karst potential for the Site is identified as medium, with the nearest area of non-karst potential located 3.19 miles to the northeast and nearest area of high karst potential located 1.86 miles to the south. The

Site is in a FEMA flood hazard area identified as FEMA Zone X (undetermined hazard); the nearest identified FEMA flood hazard area, classified as Zone A, is 0.20 miles to the southeast.

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

**Closure Criteria**

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

No DTGW well was identified within a 0.5-mile radius of the Site. In accordance with NMAC 19.15.29.11 and 19.15.29.12, the Site is evaluated under the most stringent closure criteria—assuming groundwater is less than 50 feet bgs.

| Table 1: Release Information and Closure Criteria Limits |   |                           |  |
|--|---|---------------------------|--|
| Depth to Ground Water Determination: < 50 feet bgs       |   |                           |  |
| Site Name  | Horn 22-27-34 Federal Com #412H/East Pad  | Company                   | Devon Energy Production Company, LP                          |
| API/Facility ID Number                                   | 30-015-54659/<br>fAPP2332566148   | PLSS<br>GPS               | P-15-26S-29E<br>32.03797, -103.966386                        |
| Lease ID   | NMNM21767   | Land Status               | BLM (Federal)  |
| Incident ID(s)   | nAPP2534540759<br>nAPP2535875277<br>nAPP2602732510  | Date Of Release(s)        | 12/6/2025<br>12/20/2025<br>1/26/2026                         |
| Source of Release  | Pinhole leak on suction line<br>Ball valve developed leak<br>Pinhole leak on dump line                      | Volume Released/Recovered | 75 bbls/75 bbls pw<br>30 bbls/30 bbls pw<br>5 bbls/5 bbls pw |
| Specific Features  | DTGW POD outside of 0.5-mile radius; Medium karst potential; No surface water within proximity; FEMA Zone X |                           |  |

**Liner Inspection Activities**

For all three incidents associated with the Site, a notification of inspection scheduled for February 25, 2026, was provided to Devon via email on February 20, 2026, with official notification submitted through the Operator's Electronic Permitting and Payment Portal on February 23, 2026, in accordance with 19.15.29.11(A)(5)(a)(iii) NMAC. A copy of the notification is included in **Appendix C**.

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

**Conclusion**

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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 nAPP2534540759, nAPP2535875277, and nAPP2602732510.

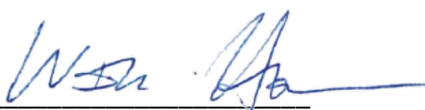
Based on the site assessment and activities conducted, Devon Energy respectfully requests closure of the three listed incidents with a no further action (NFA) determination.

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

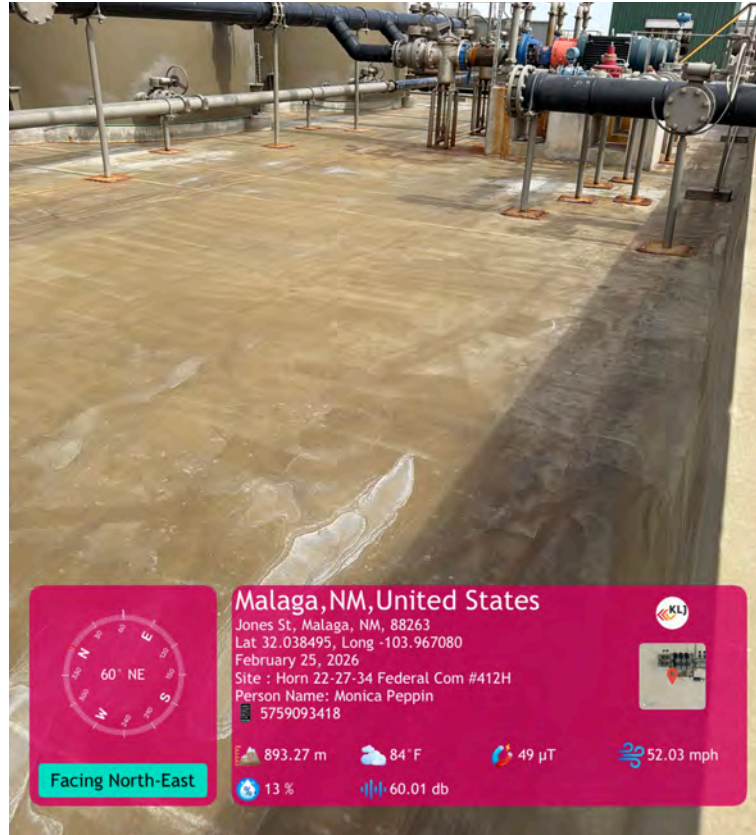
|                        |                             |   |                   |
|------------------------|-----------------------------|---|-------------------|
| <b>Client:</b>         | Devon Energy                | <b>Date:</b>  | February 25, 2026 |
| <b>Site:</b>           | Horn 22 27 34 Fed Com #412H | <b>Arrival Time:</b>  | 1:08 PM           |
| <b>Lat/Long:</b>       | 32.03797, -103.966386       | <b><u>Incident ID's</u></b><br>nAPP2534540759<br>nAPP2535875277<br>nAPP2602732510 |                   |
| <b>Client Contact:</b> | Jim Raley                   |   |                   |
| <b>Land Status:</b>    | BLM                         |   |                   |
| <b>County:</b>         | Eddy                        |   |                   |
| <b>Lease ID:</b>       | NMNM21767                   |   |                   |
| <b>Facility ID:</b>    | fAPP2317134046              |   |                   |

## Observations and Field Notes

- 1:10 PM – Arrived on site, conducted a brief safety assessment, and completed required safety documentation. Site conditions were observed for potential hazards prior to initiating work activities.
- 1:26 PM – Began liner inspection by performing a visual walk-through of both the tank battery containment and the separators/heaters containment, including the area in between both containments.
- 1:29 PM – Liner surface observed to be clean, intact, and in good condition.
- 1:30 PM – No rips, tears, punctures, or areas of concern were identified. Seams were inspected and showed no signs of separation, stress-related damage, or weathering impacts.
- 1:32 PM – Photographs were collected from all cardinal directions, between tanks, in between both containments, and at various angles around equipment to document existing conditions.
- 1:40 PM – Based on visual inspection findings, liners within both containments passed inspection and are compliant with applicable standards.

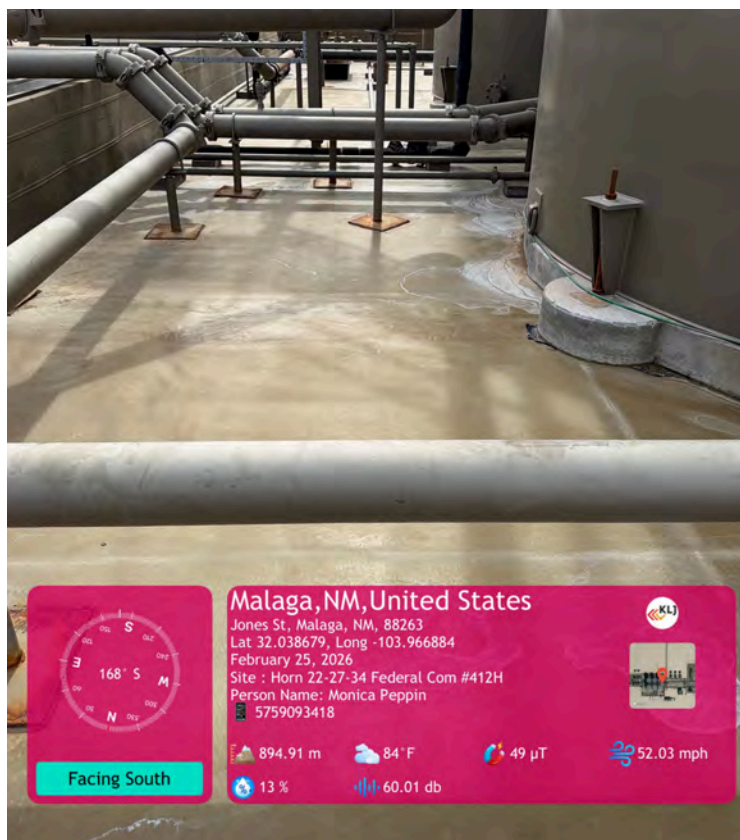


# Photolog





# Photolog





# Photolog





# Photolog



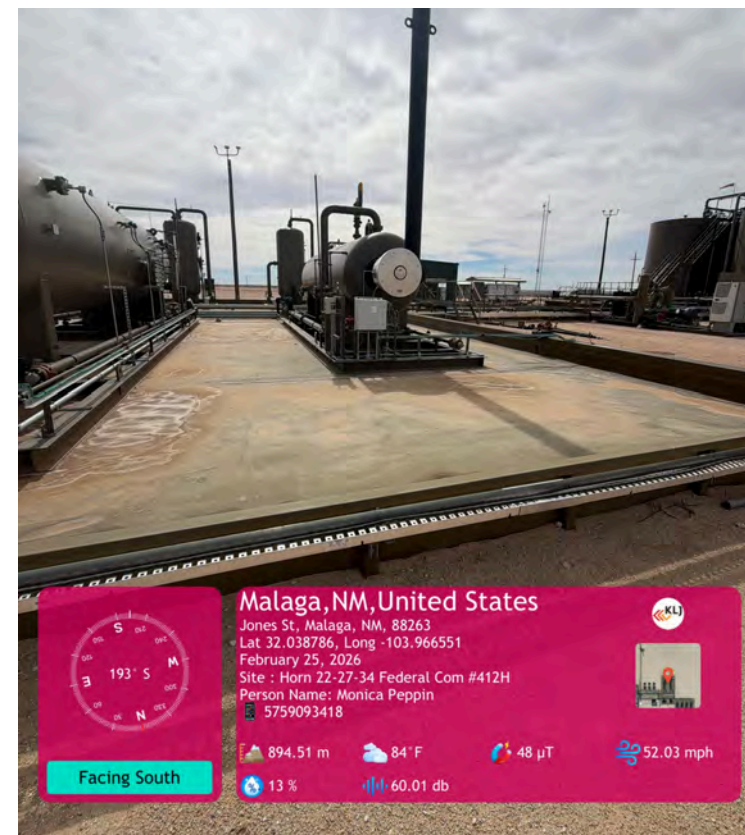
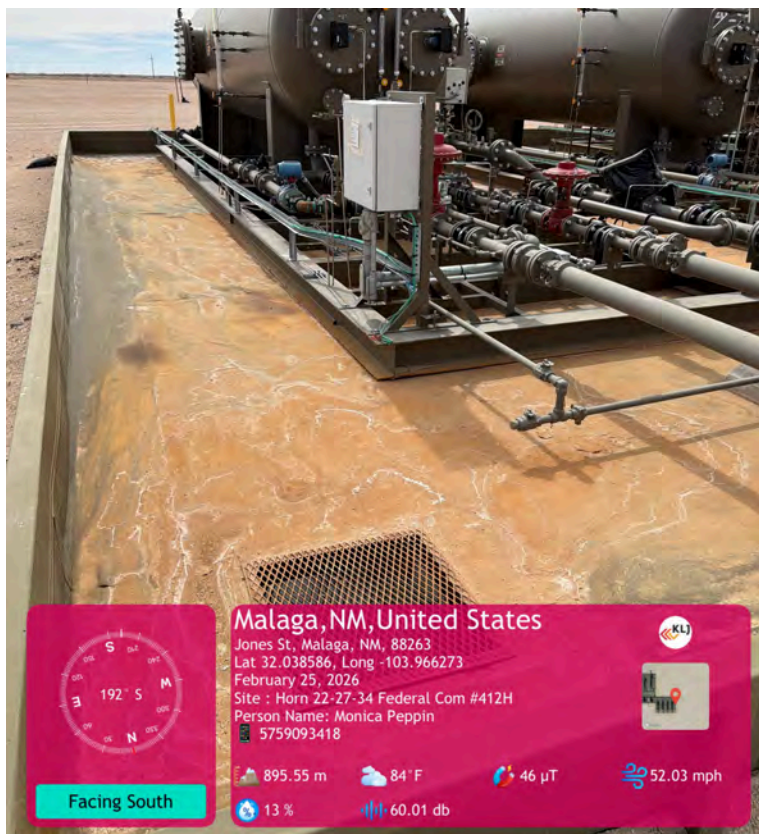


# Photolog



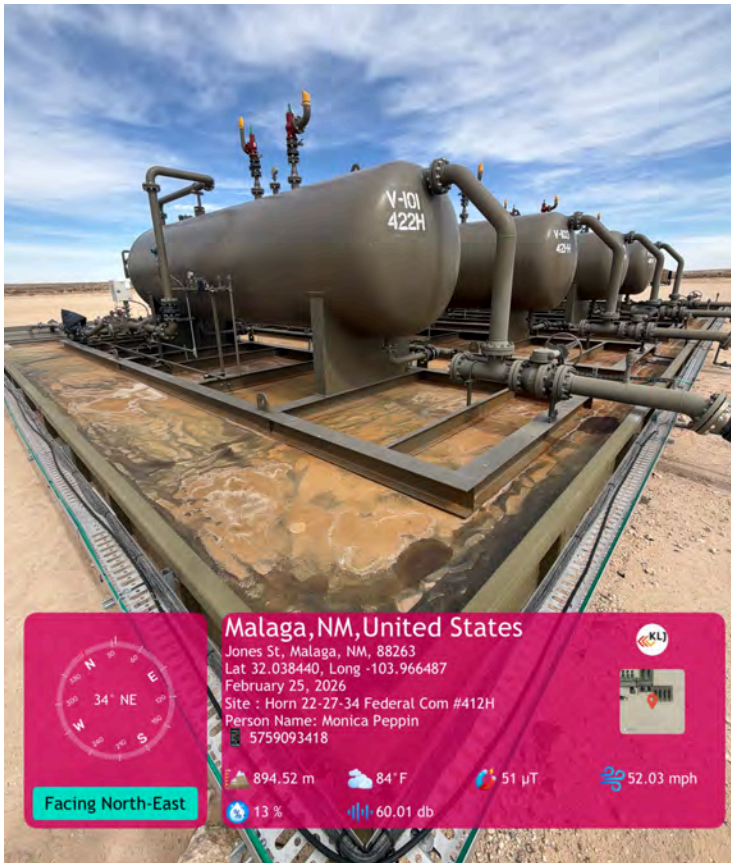


# Photolog





# Photolog



## Additional Notes & Recommendations

- Inspection complete. No further action of recommendations.
- Site is within compliance of regulations.

## Acknowledgement & Signature

Technician: Monica Peppin

Date: February 25, 2026

Signature:

Departure Time: 1:48 PM



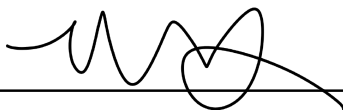
## Additional Notes & Recommendations

- Inspection complete. Liner meets standards and is in compliance.
- Finish uploading field notes and photolog report for supporting documentation to request closure.
- Complete closure report and submit for regulatory review once internal review is complete and sent to Devon for review.

## Acknowledgement & Signature

**Technician:** Monica Peppin

**Date:** 2/25/2026

**Signature:** 

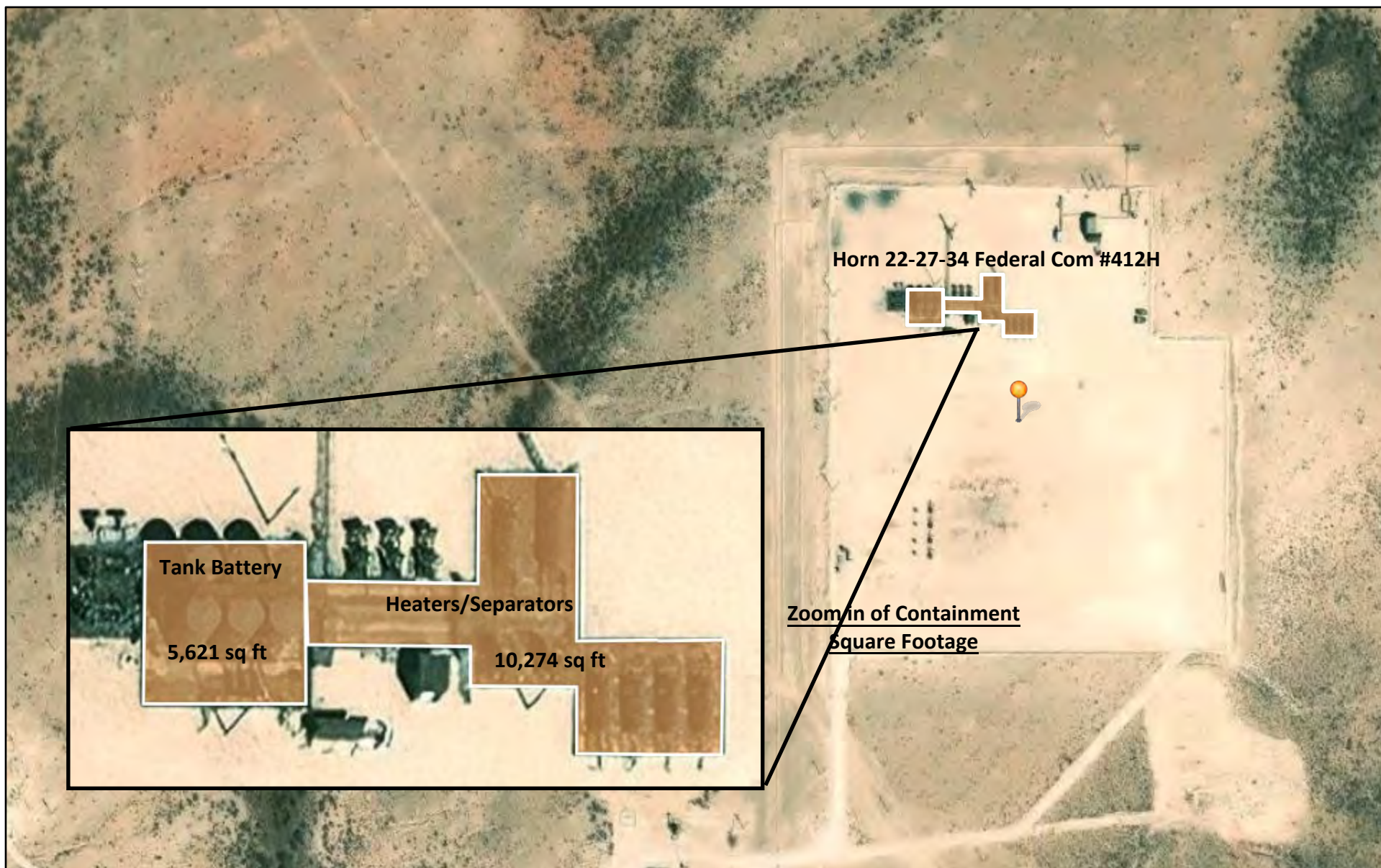
**Departure**

**Time:** 1:43 PM

## APPENDIX B

### CLOSURE CRITERIA RESEARCH

# Horn 22 27 34 Federal Com #412H Site Diagram



Approx. Area of Tank Battery Containment

5,621 sq ft

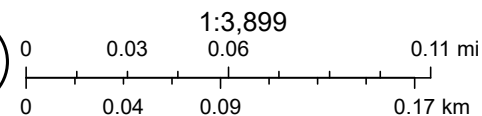
Approx. Area of Separator/Heater

Containment

10,274 sq ft

Total Area

15,895 sq ft



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

Monica Peppin

3/10/2026, 12:37:06 PM

GIS WATERS PODs

- |          |                          |          |         |
|----------|--------------------------|----------|---------|
| Pending  | Changed Location of Well | Pending  | Capped  |
| Active   | Plugged                  | Active   | Plugged |
| Inactive | Unknown                  | Inactive | Unknown |
|          | Changed Location of Well |          |         |

# Horn 22 27 34 Federal Com #412H Depth to Groundwater Proximity Map

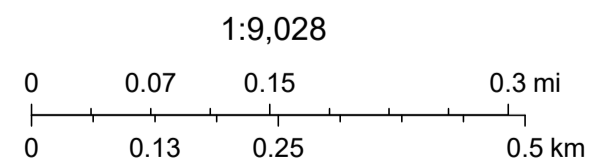


2/9/2026, 4:01:11 PM

- Override 1
- New Mexico State Trust Lands
- Subsurface Estate
- Both Estates

**Nearest DTGW Pod**  
 OSE Pod C-04630-POD1  
**Distance**  
 1.24 miles  
**Pod Type**  
 Monitor Well

**Depth of Well**  
 55 ft bgs  
**Water Bearing Zone Encountered**  
 No



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



# 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/](http://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](mailto: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: C04630 (POD-1)

Name of well owner: Devon Energy

Mailing address: 6488 7 Rivers Hwy County: Eddy

City: Artesia State: NM Zip code: 88210

Phone number: 575-748-1838 E-mail: Dale.Woodall@dvn.com

### III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Jackie D. Atkins (Atkins Engineering Associates)

New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/2023

**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, 1 min, 17.32 sec  
Longitude: 103 deg, 58 min, 30.17 sec, NAD 83

2) Reason(s) for plugging well(s):

Soil boring to determine groundwater level OSE DII MAY 20 2022 PM 3:34

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? N/A If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: Unknown feet below land surface / feet above land surface (circle one)

6) Depth of the well: 55 feet

- 7) Inside diameter of innermost casing: 1" or 2" inches.
- 8) Casing material: Temporary PVC SCH 40
- 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): \_\_\_\_\_
- 10) What annular interval surrounding the artesian casing of this well is cement-grouted? N/A
- 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? N/A 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:
 

The temporary 1" or 2" well material will be removed. Tremied from bottom to land Neat Cement in lifts
- 2) Will well head be cut-off below land surface after plugging? N/A

**VI. PLUGGING AND SEALING MATERIALS:**

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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: 87
- 4) Type of Cement proposed: Type I/II Neat Cement
- 5) Proposed cement grout mix: <6.0 gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be: \_\_\_\_\_ batch-mixed and delivered to the site  
X mixed on site

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

N/A

8) Additional notes and calculations:

Site ID:34  
Location Name:East Pecos Fed Com 22 #1

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

The temporary well material will be removed. If no water is encountered then drill cuttings will be used to (10) ten feet of land surface and plugged using hydrated bentonite. If ground water is encountered the boring will be plugged tremie from bottom to a slurry of Portland TYPE I/II Neat cement in lifts. A 6.5" borehole will be plugged.

**VIII. SIGNATURE:**

I, Dale Woodall (Devon Energy), 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  
Dale Woodall New 18 0013 1347 0011

05/19/2022

Signature of Applicant

Date

**IX. ACTION OF THE STATE ENGINEER:**

This Well Plugging Plan of Operations is:

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- Approved subject to the attached conditions.
- Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 24 day of May, 2022

Mike A. Hoffman P.E.  
John R. D'Antonio Jr. P.E., New Mexico State Engineer

By: Jub Davatz



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

|   | <b>Interval 1 – deepest</b> | <b>Interval 2</b> | <b>Interval 3 – most shallow</b>   |
|---|-----------------------------|-------------------|--|
|   |                             |                   | 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)                          | N/A                         | N/A               | N/A  |
| Bottom of proposed interval of grout placement (ft bgl)                       | N/A                         | N/A               | 55   |
| Theoretical volume of grout required per interval (gallons)                   | N/A                         | N/A               | 87   |
| Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement | N/A                         | N/A               | <6.0   |
| Mixed on-site or batch-mixed and delivered?                                   | N/A                         | N/A               | On-Site  |
| Grout additive 1 requested  | N/A                         | N/A               | N/A  |
| Additive 1 percent by dry weight relative to cement                           | N/A                         | N/A               | N/A  |
| Grout additive 2 requested  | N/A                         | N/A               | N/A  |
| Additive 2 percent by dry weight relative to cement                           | N/A                         | N/A               | N/A  |

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

|   | <b>Interval 1 – deepest</b> | <b>Interval 2</b> | <b>Interval 3 – most shallow</b>   |
|---|-----------------------------|-------------------|--|
|   |                             |                   | 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)        | N/A                         | N/A               | 0  |
| Bottom of proposed sealant of grout placement (ft bgl)        | N/A                         | N/A               | 10   |
| Theoretical volume of sealant required per interval (gallons) | N/A                         | N/A               | 15   |
| Proposed abandonment sealant (manufacturer and trade name)    | N/A                         | N/A               | Bariod Hole Plug   |

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Form 3100-11  
(February 2003)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0145  
Expires: 11/30/2005

Serial Number  
NMNM 116574

OFFER TO LEASE AND LEASE FOR OIL AND GAS

The undersigned (reverse) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

READ INSTRUCTIONS BEFORE COMPLETING

1. Name DEVON ENERGY PRODUCTION COMPANY LP  
Street 20 NORTH BROADWAY, SUITE 1500  
City, State, Zip Code OKLAHOMA CITY, OK 73101

2. This application/offer/lease is for: (Check only One)  PUBLIC DOMAIN LANDS  ACQUIRED LANDS (percent U.S. interest \_\_\_\_\_)

Surface managing agency if other than BLM: \_\_\_\_\_ Unit/Project \_\_\_\_\_

Legal description of land requested: \_\_\_\_\_ \*Parcel No.: \_\_\_\_\_ \*Sale Date (m/d/y): \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

\*SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.

T. R. Meridian State County

Amount remitted: Filing fee \$ \_\_\_\_\_ Rental fee \$ \_\_\_\_\_ Total acres applied for \_\_\_\_\_  
Total \$ \_\_\_\_\_

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T. 0240S R. 0320E Meridian NMPM State NM County Lea  
Sec. 013 SWSW;  
024 ALL;

USE BY MAY 20 2022 PM 3:34

Total acres in lease 680.000  
Rental retained \$ 1020.00

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term of lease:

Noncompetitive lease (ten years)

Competitive lease (ten years)

Other \_\_\_\_\_

THE UNITED STATES OF AMERICA

by Becky A. Olivas  
(Signing Officer)

LAND LAW EXAMINER, FLUIDS ADJUDICATION TEAM

AUG 14 2006

(Title)

(Date)

EFFECTIVE DATE OF LEASE

SEP - 1 2006

(Continued on reverse)

4. (a) Undersigned certifies that (1) offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory thereof; (2) all parties holding an interest in the offer are in compliance with 43 CFR 3100 and the leasing authorities; (3) offeror's chargeable interests, direct and indirect, in each public domain and acquired lands separately in the same State, do not exceed 246,080 acres in oil and gas leases (of which up to 200,000 acres may be in oil and gas options), or 300,000 acres in leases in each leasing District in Alaska of which up to 200,000 acres may be in options; (4) offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located; (5) offeror is in compliance with qualifications concerning Federal coal lease holdings provided in sec. 2(a)(2)(A) of the Mineral Leasing Act; (6) offeror is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (7) offeror is not in violation of sec. 41 of the Act.

(b) Undersigned agrees that signature to this offer constitutes acceptance of this lease, including all terms, conditions, and stipulations of which offeror has been given notice, and any amendment or separate lease that may include any land described in this offer open to leasing at the time this offer was filed but omitted for any reason from this lease. The offeror further agrees that this offer cannot be withdrawn, either in whole or in part, unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments. 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Duly executed this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_

(Signature of Lessee or Attorney-in-fact)

#### LEASE TERMS

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Sec. 1. Rentals—Rentals shall be paid to proper office of lessor in advance of each lease year. Annual rental rates per acre or fraction thereof are:

- (a) Noncompetitive lease, \$1.50 for the first 5 years; thereafter \$2.00;
- (b) Competitive lease, \$1.50; for the first 5 years; thereafter \$2.00;
- (c) Other, see attachment, or

as specified in regulations at the time this lease is issued.

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, and the plan contains a provision for allocation of production, royalties shall be paid on the production allocated to this lease. However, annual rentals shall continue to be due at the rate specified in (a), (b), or (c) for those lands not within a participating area.

Failure to pay annual rental, if due, on or before the anniversary date of this lease (or next official working day if office is closed) shall automatically terminate this lease by operation of law. Rentals may be waived, reduced, or suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties—Royalties shall be paid to proper office of lessor. Royalties shall be computed in accordance with regulations on production removed or sold. Royalty rates are:

- (a) Noncompetitive lease, 12 1/2 %;
- (b) Competitive lease, 12 1/2 %;
- (c) Other, see attachment; or

as specified in regulations at the time this lease is issued.

Lessor reserves the right to specify whether royalty is to be paid in value or in kind, and the right to establish reasonable minimum values on products after giving lessee notice and an opportunity to be heard. When paid in value, royalties shall be due and payable on the last day of the month following the month in which production occurred. When paid in kind, production shall be delivered, unless otherwise agreed to by lessor, in merchantable condition on the premises where produced without cost to lessor. Lessee shall not be required to hold such production in storage beyond the last day of the month following the month in which production occurred, nor shall lessee be held liable for loss or destruction of royalty oil or other products in storage from causes beyond the reasonable control of lessee.

Minimum royalty in lieu of rental of not less than the rental which otherwise would be required for that lease year shall be payable at the end of each lease year beginning on or after a discovery in paying quantities. This minimum royalty may be waived, suspended, or reduced, and the above royalty rates may be reduced, for all or portions of this lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

An interest charge shall be assessed on late royalty payments or underpayments in accordance with the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) (30 U.S.C. 1701). Lessee shall be liable for royalty payments on oil and gas lost or wasted from a lease site when such loss or waste is due to negligence on the part of the operator, or due to the failure to comply with any rule, regulation, order, or citation issued under FOGRMA or the leasing authority.

Sec. 3. Bonds—A bond shall be filed and maintained for lease operations as required under regulations.

Sec. 4. Diligence, rate of development, unitization, and drainage—Lessee shall exercise reasonable diligence in developing and producing, and shall prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of area, field, or pool embracing these leased lands. Lessee shall drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection—Lessee shall file with proper office of lessor, not later than 30 days after effective date thereof, any contract or evidence of other arrangement for sale or disposal of production. At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation costs. In the form prescribed by lessor, lessee shall keep a daily drilling record, a log, information on well surveys and tests, and a record of subsurface investigations and furnish copies to lessor when required. Lessee shall keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee shall maintain copies of all contracts, sales agreements, accounting records, and documentation such as billings, invoices, or similar documentation that supports

costs claimed as manufacturing, preparation, and/or transportation costs. All such records shall be maintained in lessee's accounting offices for future audit by lessor. Lessee shall maintain required records for 6 years after they are generated or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessor.

During existence of this lease, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 6. Conduct of operations—Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

Sec. 7. Mining operations—To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations.

Sec. 8. Extraction of helium—Lessor reserves the option of extracting or having extracted helium from gas production in a manner specified and by means provided by lessor at no expense or loss to lessee or owner of the gas. Lessee shall include in any contract of sale of gas the provisions of this section.

Sec. 9. Damages to property—Lessee shall pay lessor for damage to lessor's improvements, and shall save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 10. Protection of diverse interests and equal opportunity—Lessee shall: pay when due all taxes legally assessed and levied under laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at least twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; and take measures necessary to protect the health and safety of the public.

Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. If lessee operates a pipeline, or owns controlling interest in a pipeline or a company operating a pipeline, which may be operated accessible to oil derived from these leased lands, lessee shall comply with section 28 of the Mineral Leasing Act of 1920.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractors shall maintain segregated facilities.

Sec. 11. Transfer of lease interests and relinquishment of lease—As required by regulations, lessee shall file with lessor any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which shall be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 12. Delivery of premises—At such time as all or portions of this lease are returned to lessor, lessee shall place affected wells in condition for suspension or abandonment, reclaim the land as specified by lessor and, within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells.

Sec. 13. Proceedings in case of default—If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation unless or until the leasehold contains a well capable of production of oil or gas in paying quantities, or the lease is committed to an approved cooperative or unit plan or communitization agreement which contains a well capable of production of unitized substances in paying quantities. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time. Lessee shall be subject to applicable provisions and penalties of FOGRMA (30 U.S.C. 1701).

Sec. 14. Heirs and successors-in-interest—Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to the heirs, executors, administrators, successors, beneficiaries, or assignees of the respective parties hereto.

NM-11-LN

**Special Cultural Resource**  
**Lease Notice**

All development activities proposed under the authority of this lease are subject to compliance with Section 106 of the NHPA and Executive Order 13007. The lease area may contain historic properties, traditional cultural properties (TCP's), and/or sacred sites currently unknown to the BLM that were not identified in the Resource Management Plan or during the lease parcel review process. Depending on the nature of the lease developments being proposed and the cultural resources potentially affected, compliance with Section 106 of the National Historic Preservation Act and Executive Order 13007 could require intensive cultural resource inventories, Native American consultation, and mitigation measures to avoid adverse effects—the costs for which will be borne by the lessee. The BLM may require modifications to or disapprove proposed activities that are likely to adversely affect TCP's or sacred sites for which no mitigation measures are possible. This could result in extended time frames for processing authorizations for development activities, as well as changes in the ways in which developments are implemented.

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Bureau of Land Management  
New Mexico State Office

NM-11-LN  
February 9, 2004



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

May 24, 2022

Devon Energy  
6488 7 Rivers Hwy  
Artesia NM 88210

RE: Well Plugging Plan of Operations for C-04625-POD1, C-04626-POD1, C-04627-POD1, C-04628-POD1, C-04629-POD1, and C-04630-POD1

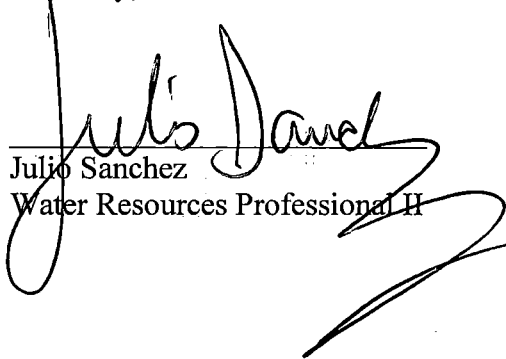
Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced project. 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.

- (1) Plugging operations shall also be conducted in accordance with NMED, NMOCD, or other State or Federal agencies having oversight for the above described project.**
- (2) Neat Cement Slurry: No more than 6.0 Gallons water per 94-lb sack Portland cement**
- (3) Bentonite Pellets: Fresh water to be added above water column at rate of 5 gallons per 50-lb sack/bucket**
- (4) Any deviation from this plan must obtain an approved variance from this office prior to implementation.**

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,

  
 Julio Sanchez  
 Water Resources Professional II



# 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-4630

Well owner: Devon Energy Phone No.: 575-748-1838

Mailing address: 6488 7 Rivers Hwy

City: Artesia State: New Mexico Zip code: 88210

## II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins ( Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge, Cameron Pruitt
- 4) Date well plugging began: 7/13/2022 Date well plugging concluded: 7/13/2022
- 5) GPS Well Location: Latitude: 32 deg, 1 min, 17.32 sec  
Longitude: 103 deg, 58 min, 30.17 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 51 ft below ground level (bgl),  
by the following manner: water level probe
- 7) Static water level measured at initiation of plugging: n/a ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 5/23/2022
- 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):

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- 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:

| <u>Depth</u><br>(ft bgl) | <u>Plugging Material Used</u><br>(include any additives used) | <u>Volume of Material Placed</u><br>(gallons) | <u>Theoretical Volume of Borehole/ Casing</u><br>(gallons) | <u>Placement Method</u><br>(tremie pipe, other) | <u>Comments</u><br>("casing perforated first", "open annular space also plugged", etc.) |
|--------------------------|---|---|--|---|---|
| 0-10'                    | Hydrated Bentonite  | Approx. 15 gallons                            | 15 gallons   | Augers  |   |
| 10'-55'                  | Drill Cuttings  | Approx. 71 gallons                            | 71 gallons   | Boring  |   |

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

**III. SIGNATURE:**

I, Jackie D. Atkins, 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.

*Jackie D. Atkins*

7/15/2022

Signature of Well Driller

Date

2022 JUL 15 2022 AM 10:02



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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

|  |  |   |   |  |   |  |                                |                    |
|--|--|---|---|--|---|--|--------------------------------|--------------------|
| <b>1. GENERAL AND WELL LOCATION</b>  | OSE POD NO. (WELL NO.)<br><b>POD 1 (TW-1)</b>  |   | WELL TAG ID NO.<br><b>N/A</b>                         |  | OSE FILE NO(S).<br><b>C-4630</b>  |  |                                |                    |
|  | WELL OWNER NAME(S)<br><b>Devon Energy</b>  |   |   |  | PHONE (OPTIONAL)<br><b>575-748-1838</b>                                     |  |                                |                    |
|  | WELL OWNER MAILING ADDRESS<br><b>6488 7 Rivers Hwy</b>   |   |   |  | CITY<br><b>Artesia</b>  | STATE<br><b>NM</b>   | ZIP<br><b>88210</b>            |                    |
|  | WELL LOCATION (FROM GPS)   | DEGREES<br><b>32</b>                                | MINUTES<br><b>1</b>                                   | SECONDS<br><b>17.32</b>  | <b>N</b>  | * ACCURACY REQUIRED: ONE TENTH OF A SECOND<br>* DATUM REQUIRED: WGS 84 |                                |                    |
|  |  | LONGITUDE<br><b>103</b>                             | <b>58</b>   | <b>30.17</b>   | <b>W</b>  |  |                                |                    |
| DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE<br><b>SW SE SW Sec.22 T26S R29S NMPM</b> |  |   |   |  |   |  |                                |                    |
| <b>2. DRILLING &amp; CASING INFORMATION</b>  | LICENSE NO.<br><b>1249</b>   | NAME OF LICENSED DRILLER<br><b>Jackie D. Atkins</b> |   |  | NAME OF WELL DRILLING COMPANY<br><b>Atkins Engineering Associates, Inc.</b> |  |                                |                    |
|  | DRILLING STARTED<br><b>6/15/2022</b>   | DRILLING ENDED<br><b>6/15/2022</b>                  | DEPTH OF COMPLETED WELL (FT)<br><b>Temporary Well</b> | BORE HOLE DEPTH (FT)<br><b>±55</b>   | DEPTH WATER FIRST ENCOUNTERED (FT)<br><b>n/a</b>                            |  |                                |                    |
|  | COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)  |   |   |  | STATIC WATER LEVEL IN COMPLETED WELL (FT)<br><b>n/a</b>                     | DATE STATIC MEASURED<br><b>6/15/2022, 7/13/2022</b>                    |                                |                    |
|  | DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:   |   |   |  |   |  |                                |                    |
|  | DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: <b>Hollow Stem Auger</b> |   |   |  |   | CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>    |                                |                    |
|  | DEPTH (feet bgl)   |   | BORE HOLE DIAM (inches)                               | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter)                              | CASING INSIDE DIAM. (inches)   | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|  | FROM   | TO  |   |  |   |  |                                |                    |
|  | <b>0</b>   | <b>55</b>   | <b>±6.5</b>   | <b>Boring-HSA</b>  | <b>--</b>   | <b>--</b>  | <b>--</b>                      | <b>--</b>          |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
| <b>3. ANNULAR MATERIAL</b>   | DEPTH (feet bgl)   |   | BORE HOLE DIAM. (inches)                              | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL                      | AMOUNT (cubic feet)   | METHOD OF PLACEMENT  |                                |                    |
|  | FROM   | TO  |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |
|  |  |   |   |  |   |  |                                |                    |

|                      |                         |                 |              |  |               |  |  |
|----------------------|-------------------------|-----------------|--------------|--|---------------|--|--|
| FOR OSE INTERNAL USE |                         |                 |              | WR-20 WELL RECORD & LOG (Version 01/28/2022) |               |  |  |
| FILE NO.             | <b>C-4630</b>           | POD NO.         | <b>POD 1</b> | TRN NO.                                      | <b>726199</b> |  |  |
| LOCATION             | <b>26S 29E 22 3.4.3</b> | WELL TAG ID NO. | <b>NA</b>    | PAGE 1 OF 2                                  |               |  |  |

OSE ON JUL 15 2022 4:11:34



File No. C-04630

## 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:<br><input type="checkbox"/> Exploratory Well (Pump test)<br><input type="checkbox"/> Monitoring Well           | <input type="checkbox"/> Pollution Control And/Or Recovery<br><input type="checkbox"/> Construction Site/Public Works Dewatering<br><input type="checkbox"/> Mine Dewatering | <input type="checkbox"/> Ground Source Heat Pump<br><input checked="" type="checkbox"/> Other(Describe): Groundwater Determination |
| A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive. |  |  |
| <input type="checkbox"/> Temporary Request - Requested Start Date:  |  | Requested End Date:  |
| Plugging Plan of Operations Submitted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No              |  |  |

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#### 1. APPLICANT(S)

|  |   |
|--|---|
| Name:<br>Devon Energy  | Name:   |
| Contact or Agent: Dale Woodall<br>check here if Agent <input type="checkbox"/>                                 | Contact or Agent:<br>check here if Agent <input type="checkbox"/>                   |
| Mailing Address:<br>6488 7 Rivers Hwy  | Mailing Address:  |
| City:<br>Artesia   | City:   |
| State: NM      Zip Code: 88210   | State:      Zip Code:   |
| Phone: 575-748-1838<br>Phone (Work):<br><input type="checkbox"/> Home <input checked="" type="checkbox"/> Cell | Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell<br>Phone (Work): |
| E-mail (optional):<br>Dale.Woodall@dvn.com   | E-mail (optional):  |

FOR OSE INTERNAL USE      Application for Permit, Form WR-07, Rev 11/17/16

|   |                                  |                             |
|---|----------------------------------|-----------------------------|
| File No.: <u>C-04630</u>                              | Trn. No.: <u>726174</u>          | Receipt No.: <u>2-44610</u> |
| Trans Description (optional): <u>22 265 292 3.4.3</u> |                                  |                             |
| Sub-Basin: <u>C</u>                                   | PCW/LOG Due Date: <u>5/24/23</u> |                             |

**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)       UTM (NAD83) (Meters)       Lat/Long (WGS84) (to the nearest 1/10<sup>th</sup> of second)  
 NM West Zone                               Zone 12N  
 NM East Zone                                   Zone 13N  
 NM Central Zone

| Well Number (if known): | X or Easting or Longitude: | Y or Northing or Latitude: | Provide if known:<br>-Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR<br>- Hydrographic Survey Map & Tract; OR<br>- Lot, Block & Subdivision; OR<br>- Land Grant Name |
|-------------------------|----------------------------|----------------------------|--|
| C-04630- POD1(FW-1)     | -103°58'30.17"             | 32°1'17.32"                | SW SE SW Sec.22 T26S R29E NMPM   |
|                         |                            |                            |  |
|                         |                            |                            |  |
|                         |                            |                            |  |
|                         |                            |                            |  |
|                         |                            |                            |  |

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**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 \_\_\_\_\_**

Other description relating well to common landmarks, streets, or other:

Site ID: 34  
 Location Name: East Pecos Fed Corn 22 #1

Well is on land owned by: State of New Mexico

**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): 2.375

Driller Name: Jackie D. Atkins      Driller License Number: 1249

**3. ADDITIONAL STATEMENTS OR EXPLANATIONS**

A Soil Boring to determine depth up to 55 feet. Temporary PVC well material will be placed to total depth and secured at surface. Temporary well will be in place for minimum of 72 hours. If ground water is encountered the boring will be plugged immediately using augers as tremie to land a slurry of Portland TYPE I/II Neat cement less than 6.0 gallons of water per 94 lb. sack. If no water is encountered then drill cuttings will be used to (10) ten feet of land surface and plugged using hydrated bentonite.

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: C-04630      Trn No.: 726174

**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:

|  |   |   |   |
|--|---|---|---|
| <p><b>Exploratory:</b><br/> <input type="checkbox"/> Include a description of any proposed pump test, if applicable.</p>   | <p><b>Pollution Control and/or Recovery:</b><br/> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following:<br/> <input type="checkbox"/> A description of the need for the pollution control or recovery operation.<br/> <input type="checkbox"/> The estimated maximum period of time for completion of the operation.<br/> <input type="checkbox"/> The annual diversion amount.<br/> <input type="checkbox"/> The annual consumptive use amount.<br/> <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation.<br/> <input type="checkbox"/> The method and place of discharge.</p>   | <p><b>Construction De-Watering:</b><br/> <input type="checkbox"/> Include a description of the proposed dewatering operation,<br/> <input type="checkbox"/> The estimated duration of the operation,<br/> <input type="checkbox"/> The maximum amount of water to be diverted,<br/> <input type="checkbox"/> A description of the need for the dewatering operation, and,<br/> <input type="checkbox"/> A description of how the diverted water will be disposed of.</p>  | <p><b>Mine De-Watering:</b><br/> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following:<br/> <input type="checkbox"/> A description of the need for mine dewatering.<br/> <input type="checkbox"/> The estimated maximum period of time for completion of the operation.<br/> <input type="checkbox"/> The source(s) of the water to be diverted.<br/> <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s).<br/> <input type="checkbox"/> The maximum amount of water to be diverted per annum.<br/> <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation.<br/> <input type="checkbox"/> The quality of the water.<br/> <input type="checkbox"/> The method of measurement of water diverted.</p> |
| <p><b>Monitoring:</b><br/> <input type="checkbox"/> Include the reason for the monitoring well, and,<br/> <input type="checkbox"/> The duration of the planned monitoring.</p> | <p><input type="checkbox"/> The method of measurement of water produced and discharged.<br/> <input type="checkbox"/> The source of water to be injected.<br/> <input type="checkbox"/> The method of measurement of water injected.<br/> <input type="checkbox"/> The characteristics of the aquifer.<br/> <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system.<br/> <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department.<br/> <input type="checkbox"/> 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.</p> | <p><b>Ground Source Heat Pump:</b><br/> <input type="checkbox"/> Include a description of the geothermal heat exchange project,<br/> <input type="checkbox"/> The number of boreholes for the completed project and required depths,<br/> <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and,<br/> <input type="checkbox"/> The duration of the project.<br/> <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.</p> | <p><input type="checkbox"/> The recharge of water to the aquifer.<br/> <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project.<br/> <input type="checkbox"/> The method and place of discharge.<br/> <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project.<br/> <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights.<br/> <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.</p>  |

**ACKNOWLEDGEMENT**

I, We (name of applicant(s)), Dale Woodall (Devon Energy)

Print Name(s)

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

OSE DIT MAY 20 2022 PM 3:34

Dale Woodall

Dale Woodall (May 19, 2022 15:57 MDT)

Applicant Signature

Applicant Signature

**ACTION OF THE STATE ENGINEER**

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 24 day of May 20 22, for the State Engineer,

Mike Hamman, P.E. State Engineer

By: K. Parekh  
Signature

Kashyap Parekh  
Print

Title: Water Resource manager I  
Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: C-04630

Trn No.: 726174

Form 3100-11  
(February 2003)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0145  
Expires: 11/30/2005

Serial Number  
NMNM 116574

OFFER TO LEASE AND LEASE FOR OIL AND GAS

The undersigned (reverse) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

READ INSTRUCTIONS BEFORE COMPLETING

1. Name DEVON ENERGY PRODUCTION COMPANY LP  
Street 20 NORTH BROADWAY, SUITE 1500  
City, State, Zip Code OKLAHOMA CITY, OK 73101

2. This application/offer/lease is for: (Check only One)  PUBLIC DOMAIN LANDS  ACQUIRED LANDS (percent U.S. interest \_\_\_\_\_)

Surface managing agency if other than BLM: \_\_\_\_\_ Unit/Project \_\_\_\_\_

Legal description of land requested: \_\_\_\_\_ \*Parcel No.: \_\_\_\_\_ \*Sale Date (m/d/y): \_\_\_\_ / \_\_\_\_ / \_\_\_\_

\*SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.

T. \_\_\_\_\_ R. \_\_\_\_\_ Meridian \_\_\_\_\_ State \_\_\_\_\_ County \_\_\_\_\_

Amount remitted: Filing fee \$ \_\_\_\_\_

Rental fee \$ \_\_\_\_\_

Total acres applied for \_\_\_\_\_  
Total \$ \_\_\_\_\_

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T. 0240S R. 0320E Meridian NMPM State NM County Lea  
Sec. 013 SWSW;  
024 ALL;

USE DIT MAY 20 2022 PM 3:35

Total acres in lease 680.000  
Rental retained \$ 1020.00

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term of lease:

Noncompetitive lease (ten years)

Competitive lease (ten years)

Other \_\_\_\_\_

THE UNITED STATES OF AMERICA

by Becky A. Quinn

(Signing Officer)

LAND LAW EXAMINER, FLUIDS ADJUDICATION TEAM

AUG 14 2006

(Title)

(Date)

EFFECTIVE DATE OF LEASE

SEP - 1 2006

(Continued on reverse)

4. (a) Undersigned certifies that (1) offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory thereof; (2) all parties holding an interest in the offer are in compliance with 43 CFR 3100 and the leasing authorities; (3) offeror's chargeable interests, direct and indirect, in each public domain and acquired lands separately in the same State, do not exceed 246,080 acres in oil and gas leases (of which up to 200,000 acres may be in oil and gas options), or 300,000 acres in leases in each leasing District in Alaska of which up to 200,000 acres may be in options; (4) offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located; (5) offeror is in compliance with qualifications concerning Federal coal lease holdings provided in sec. 2(a)(2)(A) of the Mineral Leasing Act; (6) offeror is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (7) offeror is not in violation of sec. 41 of the Act.

(b) Undersigned agrees that signature to this offer constitutes acceptance of this lease, including all terms, conditions, and stipulations of which offeror has been given notice, and any amendment or separate lease that may include any land described in this offer open to leasing at the time this offer was filed but omitted for any reason from this lease. The offeror further agrees that this offer cannot be withdrawn, either in whole or in part, unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments. 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Duly executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

(Signature of Lessee or Attorney-in-fact)

#### LEASE TERMS

USE DIT MAY 20 2022 PM 3:35

Sec. 1. Rentals—Rentals shall be paid to proper office of lessor in advance of each lease year. Annual rental rates per acre or fraction thereof are:

- (a) Noncompetitive lease, \$1.50 for the first 5 years; thereafter \$2.00;
- (b) Competitive lease, \$1.50; for the first 5 years; thereafter \$2.00;
- (c) Other, see attachment, or

as specified in regulations at the time this lease is issued.

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, and the plan contains a provision for allocation of production, royalties shall be paid on the production allocated to this lease. However, annual rentals shall continue to be due at the rate specified in (a), (b), or (c) for those lands not within a participating area.

Failure to pay annual rental, if due, on or before the anniversary date of this lease (or next official working day if office is closed) shall automatically terminate this lease by operation of law. Rentals may be waived, reduced, or suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties—Royalties shall be paid to proper office of lessor. Royalties shall be computed in accordance with regulations on production removed or sold. Royalty rates are:

- (a) Noncompetitive lease, 12 1/4 %;
- (b) Competitive lease, 12 1/4 %;
- (c) Other, see attachment; or

as specified in regulations at the time this lease is issued.

Lessor reserves the right to specify whether royalty is to be paid in value or in kind, and the right to establish reasonable minimum values on products after giving lessee notice and an opportunity to be heard. When paid in value, royalties shall be due and payable on the last day of the month following the month in which production occurred. When paid in kind, production shall be delivered, unless otherwise agreed to by lessor, in merchantable condition on the premises where produced without cost to lessor. Lessee shall not be required to hold such production in storage beyond the last day of the month following the month in which production occurred, nor shall lessee be held liable for loss or destruction of royalty oil or other products in storage from causes beyond the reasonable control of lessee.

Minimum royalty in lieu of rental of not less than the rental which otherwise would be required for that lease year shall be payable at the end of each lease year beginning on or after a discovery in paying quantities. This minimum royalty may be waived, suspended, or reduced, and the above royalty rates may be reduced, for all or portions of this lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

An interest charge shall be assessed on late royalty payments or underpayments in accordance with the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) (30 U.S.C. 1701). Lessee shall be liable for royalty payments on oil and gas lost or wasted from a lease site when such loss or waste is due to negligence on the part of the operator, or due to the failure to comply with any rule, regulation, order, or citation issued under FOGRMA or the leasing authority.

Sec. 3. Bonds—A bond shall be filed and maintained for lease operations as required under regulations.

Sec. 4. Diligence, rate of development, unitization, and drainage—Lessee shall exercise reasonable diligence in developing and producing, and shall prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of area, field, or pool embracing these leased lands. Lessee shall drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection—Lessee shall file with proper office of lessor, not later than 30 days after effective date thereof, any contract or evidence of other arrangement for sale or disposal of production. At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation costs. In the form prescribed by lessor, lessee shall keep a daily drilling record, a log, information on well surveys and tests, and a record of subsurface investigations and furnish copies to lessor when required. Lessee shall keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee shall maintain copies of all contracts, sales agreements, accounting records, and documentation such as billings, invoices, or similar documentation that supports

costs claimed as manufacturing, preparation, and/or transportation costs. All such records shall be maintained in lessee's accounting offices for future audit by lessor. Lessee shall maintain required records for 6 years after they are generated or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessor.

During existence of this lease, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 6. Conduct of operations—Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

Sec. 7. Mining operations—To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations.

Sec. 8. Extraction of helium—Lessor reserves the option of extracting or having extracted helium from gas production in a manner specified and by means provided by lessor at no expense or loss to lessee or owner of the gas. Lessee shall include in any contract of sale of gas the provisions of this section.

Sec. 9. Damages to property—Lessee shall pay lessor for damage to lessor's improvements, and shall save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 10. Protection of diverse interests and equal opportunity—Lessee shall: pay when due all taxes legally assessed and levied under laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at least twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; and take measures necessary to protect the health and safety of the public.

Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. If lessee operates a pipeline, or owns controlling interest in a pipeline or a company operating a pipeline, which may be operated accessible to oil derived from these leased lands, lessee shall comply with section 28 of the Mineral Leasing Act of 1920.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractors shall maintain segregated facilities.

Sec. 11. Transfer of lease interests and relinquishment of lease—As required by regulations, lessee shall file with lessor any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which shall be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 12. Delivery of premises—At such time as all or portions of this lease are returned to lessor, lessee shall place affected wells in condition for suspension or abandonment, reclaim the land as specified by lessor and, within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells.

Sec. 13. Proceedings in case of default—If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation unless or until the leasehold contains a well capable of production of oil or gas in paying quantities, or the lease is committed to an approved cooperative or unit plan or communitization agreement which contains a well capable of production of unitized substances in paying quantities. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time. Lessee shall be subject to applicable provisions and penalties of FOGRMA (30 U.S.C. 1701).

Sec. 14. Heirs and successors-in-interest—Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to the heirs, executors, administrators, successors, beneficiaries, or assignees of the respective parties hereto.

NM-11-LN

**Special Cultural Resource**  
**Lease Notice**

All development activities proposed under the authority of this lease are subject to compliance with Section 106 of the NHPA and Executive Order 13007. The lease area may contain historic properties, traditional cultural properties (TCP's), and/or sacred sites currently unknown to the BLM that were not identified in the Resource Management Plan or during the lease parcel review process. Depending on the nature of the lease developments being proposed and the cultural resources potentially affected, compliance with Section 106 of the National Historic Preservation Act and Executive Order 13007 could require intensive cultural resource inventories, Native American consultation, and mitigation measures to avoid adverse effects—the costs for which will be borne by the lessee. The BLM may require modifications to or disapprove proposed activities that are likely to adversely affect TCP's or sacred sites for which no mitigation measures are possible. This could result in extended time frames for processing authorizations for development activities, as well as changes in the ways in which developments are implemented.

OSE DJT MAY 20 2022 PM 3:35

Bureau of Land Management  
New Mexico State Office

NM-11-LN  
February 9, 2004

**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 04630 POD1

File Number: C 04630  
Trn Number: 726199

**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-C2 No water shall be diverted from this well except for testing purposes which shall not exceed ten (10) cumulative days, and well shall be plugged or capped on or before , unless a permit to use water from this well is acquired from the Office of the State Engineer.
- 17-G If artesian water is encountered, the well driller shall comply with all rules and regulations pertaining to the drilling and casing of artesian wells.
- 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.

Trn Desc: C 04630 POD1

File Number: C 04630  
Trn Number: 726199

**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE**

**SPECIFIC CONDITIONS OF APPROVAL (Continued)**

- 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.
- LOG The Point of Diversion C 04630 POD1 must be completed and the Well Log filed on or before 05/24/2023.

IT IS THE PERMITTEE'S RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

**ACTION OF STATE ENGINEER**

|                                     |                          |
|-------------------------------------|--------------------------|
| Notice of Intention Rcvd:           | Date Rcvd. Corrected:    |
| Formal Application Rcvd: 05/20/2022 | 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 24 day of May A.D., 2022

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

By: \_\_\_\_\_  
KASHYAP PAREKH

41721:◆94422

Larry Brotman, Esri, HERE, Garmin, (c) OpenStreetMap contributors, U.S. Department of Energy Office of Legacy Management

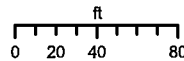
**Coordinates**  
**UTM - NAD 83 (m) - Zone 13**  
 Easting 596792.846  
 Northing 3543274.850

**State Plane - NAD 83 (f) - Zone E**  
 Easting 652379.200  
 Northing 371734.649

**Degrees Minutes Seconds**  
 Latitude 32 : 1 : 17.320000  
 Longitude -103 : 58 : 30.170000  
 Location pulled from Coordinate Search

NEW MEXICO OFFICE OF THE STATE ENGINEER

1:1,128



M. TELLES 5/24/2022



Reasonable efforts have been made by the New Mexico Office of the State Engineer (OSE) to verify that these maps accurately interpret the source data used in their preparation; however, a degree of error is inherent in all maps, and these maps may contain omissions and errors in scale, resolution, registration, positional accuracy, development methodology, interpretation of source data, and other circumstances. These maps are distributed "as is" without warranty of any kind.

**Spatial Information**  
**County: Eddy**  
**Groundwater Basin: Carlsbad**  
**Abstract Area: Carlsbad 72-12-1**  
**Carlsbad Underground Basin**  
**Land Grant: Not in Land Grant**  
**Restrictions: NA**  
**PLSS Description**  
**SESWSSEW Qtr of Sec 22 of 026S 029E**

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

**Parcel Information**  
**UPC/DocNum: 4172154294422**  
**Parcel Owner: Ross, George Ranch Llc**  
**Address: S Of 900 Whitehorn Road**  
**Carlsbad 88220**

**Legal:** Quarter: Sw S: 22 T: 26S R: 29E Quarter: Se S: 22 T: 26S R: 29E Se, S2Sw

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

- |   |   |   |  |  |   |   |
|---|---|---|--|--|---|---|
| <input type="checkbox"/> Calculated PLSS                  | <input checked="" type="checkbox"/> Catron County Parcels 2021  | <input type="checkbox"/> Doña Ana County Parcels 2021             | <input type="checkbox"/> Lea County Parcels 2021             | <input type="checkbox"/> Otero County Parcels 2021           | <input type="checkbox"/> San Juan County Parcels 2021   | <input type="checkbox"/> Taos County Parcels 2021             |
| <input checked="" type="checkbox"/> Coord Search Location | <input type="checkbox"/> Chaves County Parcels 2021             | <input type="checkbox"/> Eddy County Parcels 2021                 | <input type="checkbox"/> Lincoln County Parcels 2021         | <input checked="" type="checkbox"/> Quay County Parcels 2021 | <input type="checkbox"/> San Miguel County Parcels 2021 | <input type="checkbox"/> Torrance County Parcels 2021         |
| <input type="checkbox"/> OSE District Boundary            | <input type="checkbox"/> Cibola County Parcels 2021             | <input type="checkbox"/> Grant County Parcels 2021                | <input type="checkbox"/> Los Alamos County Parcels 2021      | <input type="checkbox"/> Rio Arriba County Parcels 2021      | <input type="checkbox"/> Santa Fe County Parcels 2021   | <input checked="" type="checkbox"/> Union County Parcels 2021 |
| <input type="checkbox"/> New Mexico State Trust Lands     | <input type="checkbox"/> Colfax County Parcels 2021             | <input type="checkbox"/> Harding County Parcels 2021              | <input type="checkbox"/> Luna County Parcels 2021            | <input type="checkbox"/> Roosevelt County Parcels 2021       | <input type="checkbox"/> Sierra County Parcels 2021     | <input type="checkbox"/> Valencia County Parcels 2021         |
| <input type="checkbox"/> Subsurface Estate                | <input type="checkbox"/> Curry County Parcels 2021              | <input type="checkbox"/> Hidalgo County Parcels 2021              | <input type="checkbox"/> McKinley County Parcels 2021        | <input type="checkbox"/> Sandoval County Parcels 2021        | <input type="checkbox"/> Socorro County Parcels 2021    | <input checked="" type="checkbox"/> Site Boundaries           |
| <input type="checkbox"/> Bernalillo County Parcels 2021   | <input checked="" type="checkbox"/> De Baca County Parcels 2021 | <input checked="" type="checkbox"/> Guadalupe County Parcels 2021 | <input checked="" type="checkbox"/> Mora County Parcels 2021 |  |   |   |

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: 726199  
File Nbr: C 04630

May. 26, 2022

DALE WOODALL  
DEVON ENERGY  
6488 7 RIVERS HWY  
ARTESIA, NM 88210

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

Sincerely,

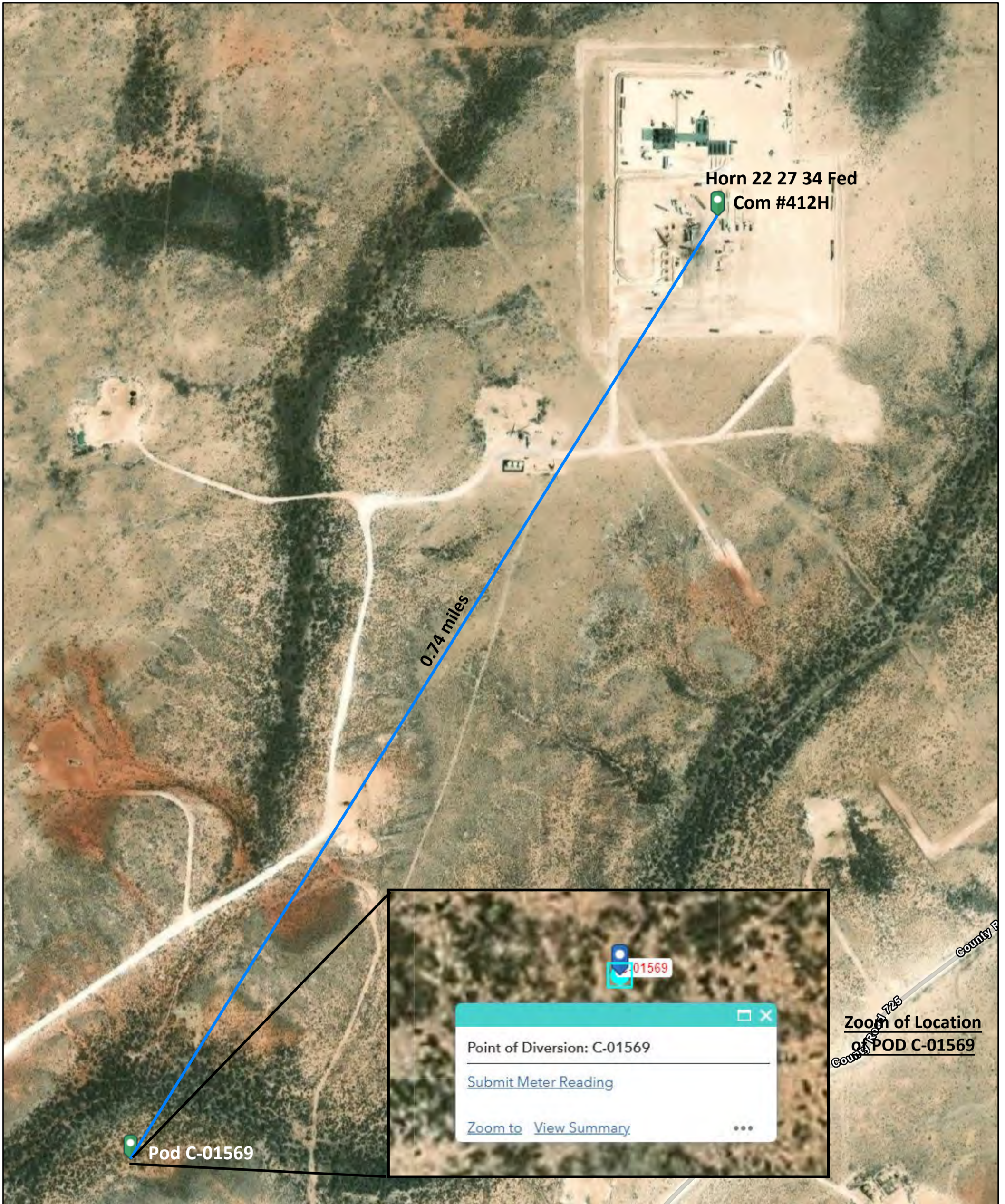
A handwritten signature in black ink, appearing to read "Megen Telles".

Megen Telles  
(575) 622-6521

Enclosure

explore

# Horn 22 27 34 Federal Com #412H Domestic Well Proximity



2/9/2026, 4:44:24 PM

— Override 1

### Nearest Domestic Well

C-01569

### Well Type

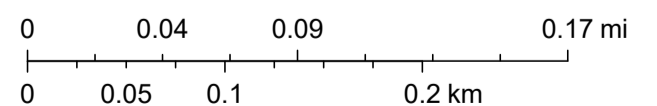
Stock Watering Pod

### Distance

0.74 miles

**No recorded depth of well**

1:4,514



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



SF



9 NOV 20 10:33

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

ROSWELL

November 16, 1989

S. E. REYNOLDS  
STATE ENGINEER  
SANTA FE, NEW MEXICO

DISTRICT II  
909 E. 2ND STREET  
P.O. BOX 1717  
ROSWELL, NEW MEXICO 88202

FILES: C-1569; C-1570

Jim Witt and Associates  
P.O. Box 1268  
Loving, New Mexico 88256

Dear Mr. Witt:

Enclosed is copy of Change of Ownership of Water Right showing that Walter B. Paschal, Jackie C. Paschal, Byron W. Paschal & Kathryn F. Paschal have acquired the rights under the subject permits which were approved in accordance with New Mexico Statutes Annotated 72-12-1.

Sincerely,

Richard C. Cibak  
Basin Supervisor  
(505) 622-6521

RCC/amg  
cc: Santa Fe  
Enclosure

READ INSTRUCTIONS ON BACK

Revised March 1972

APPLICATION TO APPROPRIATE UNDERGROUND WATERS  
IN ACCORDANCE WITH SECTION 75-11-1 NEW MEXICO STATUTES

197418  
463743  
584132

1. Name and Address of Applicant:

File No. C-1569

Roy Lindsey  
Box 568  
Pecos, Texas

74 DEC 3 PM 1 24

STATE ENGINEER OFFICE  
SANTA FE, N.M. 87501

STATE ENGINEER OFFICE  
DISTRICT II  
ROSCHEL, N.MEX.  
1974 DEC - 2 PM 8:19

2. Describe well location under one of the following subheadings:

a. SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  of Sec. 22 Twp 26 Rge. 29E. M. 7 M., in  
Eddy County.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.

d. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N. M. Coordinate System \_\_\_\_\_ Zone  
in the \_\_\_\_\_ Grant.

e. Give street address or route and box No. of property upon which well is to be located, or location by direction and  
distance from known landmarks \_\_\_\_\_

3. Approximate depth (if known) unknown feet; outside diameter of casing unknown inches.

Name of driller (if known) U.S.G.S. Shot Test Hole

4. Use of water (check appropriate box or boxes):

- Household, non-commercial trees, lawn and garden not to exceed 1 acre.
- Livestock watering.
- Drinking and sanitary purposes and the irrigation of non-commercial trees, shrubs and lawns in conjunction with a commercial operation.
- Prospecting, mining or drilling operations to discover or develop natural resources.
- Construction of public works, highways and roads.

If any of the last three were marked, give name and nature of business under Remarks. (Item 5)

5. Remarks: This is to record an old existing USGS Test Hole and to use  
for stockwatering.

I, Roy Lindsey, affirm that the foregoing statements are true to the best of my knowledge  
and belief and that development shall not commence until approval of the permit has been obtained.

X Roy Lindsey, Applicant

By: \_\_\_\_\_

Date: December 2, 1974

ACTION OF STATE ENGINEER

This application is approved for the use indicated, subject to all general conditions and to the specific conditions numbered  
1 & 4 on the reverse side hereof. This permit will automatically expire unless this well is  
drilled or driven and the well record filed on or before December 31, 1975

S. E. Reynolds, State Engineer

By: Fred H. Hennighausen  
Fred H. Hennighausen  
District II Supervisor

Date: December 2, 1974

File No. C-1569



**GENERAL CONDITIONS OF APPROVAL**

- A. The maximum amount of water that may be appropriated under this permit is 3 acre feet in any calendar year.
- B. The well shall be drilled only by a driller licensed in the State of New Mexico in accordance with Section 75-11-13 New Mexico Statutes Annotated. A licensed driller shall not be required for the construction of a driven well; provided, that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 75-11-13).
- C. Driller's log must be filed in the office of the State Engineer within 10 days after the well is drilled or driven. Failure to file the log within that time shall result in automatic cancellation of the permit. Log forms will be provided by the State Engineer upon request.
- D. The casing shall not exceed 7 inches outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.
- E. If the well under this permit is used at any time to serve more than one household, livestock in a commercial feed lot operation, or any other commercial purpose, the permittee shall comply with Specific Condition of Approval number 5(b).
- F. In the event this well is combined with other wells permitted under Section 75-11-1 New Mexico Statutes Annotated, the total outdoor use shall not exceed the irrigation of one acre of non-commercial trees, lawn, and garden, or the equivalent outside consumptive use, and the total appropriation for household and outdoor use from the entire water distribution system shall not exceed 3 acre feet per annum.

**SPECIFIC CONDITIONS OF APPROVAL**

(Applicable only when so indicated on the other side of this form.)

1. Depth of the well shall not exceed the thickness of the (a) the valley fill or (b) Ogallala formation.
2. The well shall be constructed to artesian well specifications and the State Engineer Office shall be notified before casing is landed or cemented.
3. Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.
4. Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.
5. A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the State Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water and pumping records shall be submitted to the District Supervisor (a) for each calendar month, on or before the 30th day of the following month (b) on or before the 10th of January, April, July and October of each year for the three preceding calendar months (c) for each calendar year on or before the 30th day of January of the following year.
6. The well shall be plugged upon completion of the permitted use and a plugging report shall be filed in the office of the State Engineer within 10 days.
7. Final approval for the use of the well shall be dependent upon a leakage test made by the State Engineer Office.
8. Use shall be limited strictly to household and/or drinking and sanitary purposes; water shall be conveyed from the well to the place of use in closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, garden, trees or use in any type of pool or pond is authorized under this permit.

**INSTRUCTIONS**

The application shall be made in the name of the actual user of the well for the purpose specified in the application.

The application shall be executed in triplicate and forwarded with a \$1.00 filing fee to the appropriate office of the State Engineer.

A separate application must be filed for each well to be drilled or used.

If well to be used is an existing well, an explanation (and file number, if possible) should be given under Remarks. (Item 5.)

Applications for appropriation, well logs and request for information in the following basins should be addressed to the State Engineer at the office indicated;

Bluewater, Estancia, Rio Grande, and Sandia Basins  
 District No. 1, 505 Marquette NW, Room 1023, Albuquerque, New Mexico 87101  
 Capitan, Carlsbad, Fort Sumner, Hondo, Jal, Lea, Penasco, Portales, Roswell, and  
 Upper Pecos Basins  
 District No. 2, Box 1717, Roswell, New Mexico 88201  
 Animas, Gila-San Francisco, Hot Springs, Las Animas Creek, Lordsburg, Mimbres,  
 Nutt-Hockett, Playas, San Simon, and Virden Valley Basins  
 District No. 3, Box 844, Deming, New Mexico 88030  
 Canadian River Basin  
 State Engineer Office, State Capitol, Bataan Memorial Bldg., Santa Fe, New Mexico  
 87501



U.S. Fish and Wildlife Service

## National Wetlands Inventory

Nearest Significant Watercourse/Wetlands: Riverine

Distance: 0.11 miles



December 24, 2025

### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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



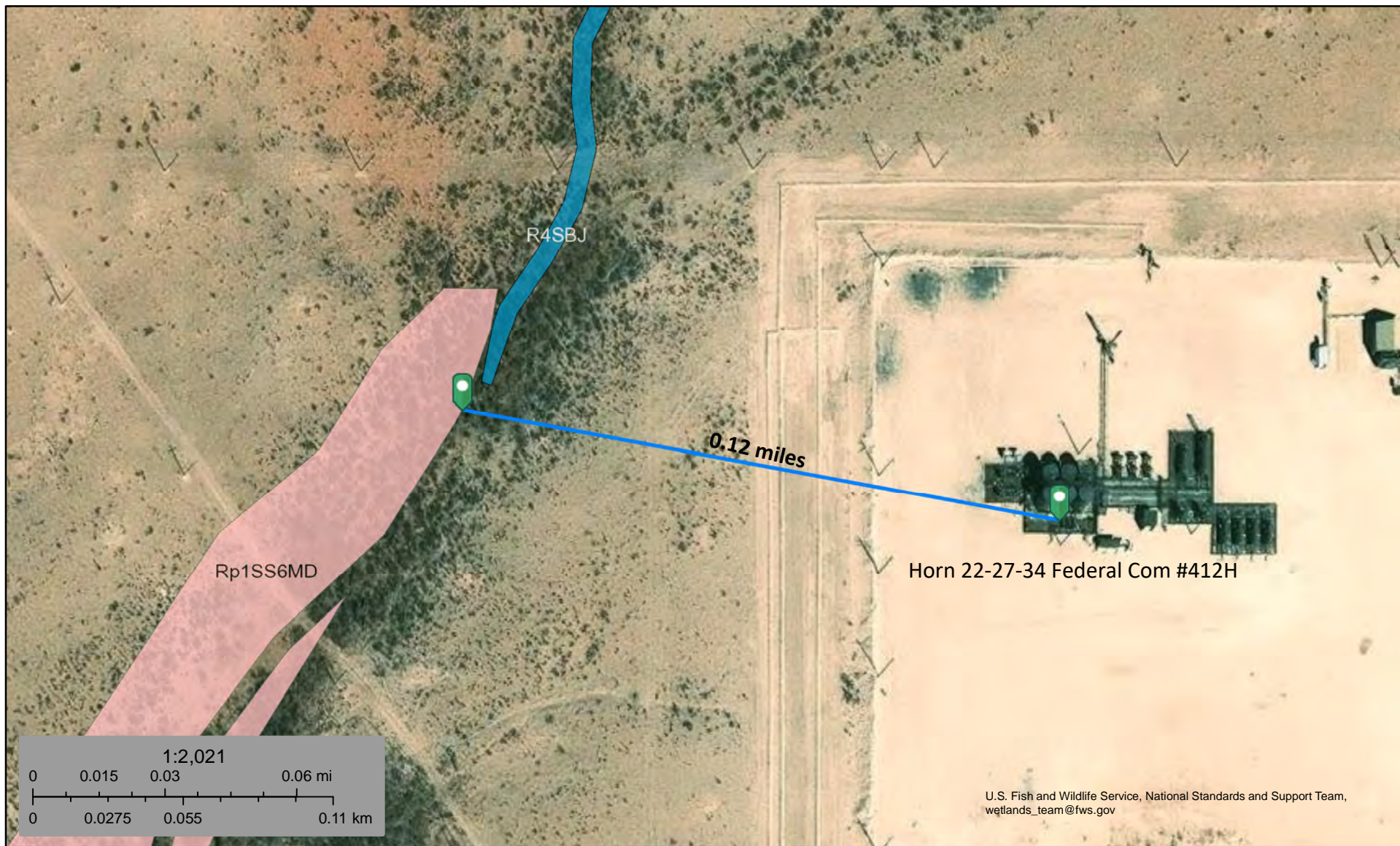
U.S. Fish and Wildlife Service

# National Wetlands Inventory

## Horn 22-27-34 Federal Com #412H

Nearest Playa: Riparian Forested/Shrub Wetland

Distance: 0.12 miles



March 10, 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.

Horn 22-27-34

# Federal Com #412H

Distance to Nearest Residence: 1.86 miles

## Legend

-  Anadarko Jackie CGF
-  Distance to Residence
-  Residence

Residence



1.86 miles

Horn 22-27-34 Federal Com #412H

Anadarko Jackie CGF






5000 ft

# Horn 22-27-34 Federal Com #412H

Nearest Municipal Boundary: Loving, NM  
Distance: 18 miles

## Legend

-  Distance to Municipal Boundary
-  Horn 22-27-34 Federal Com #412H
-  Loving Municipal Boundary

Malaga

285

18 miles

285

Horn 22-27-34 Federal Com #412H



# Horn 22-27-34 Federal Com #412H 5-mile Radius Mines Map

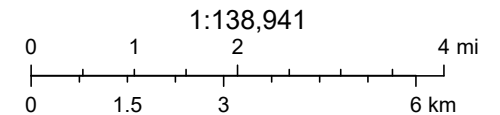


3/4/2026

Low Resolution 15m Imagery  
 High Resolution 60cm Imagery  
 High Resolution 30cm Imagery

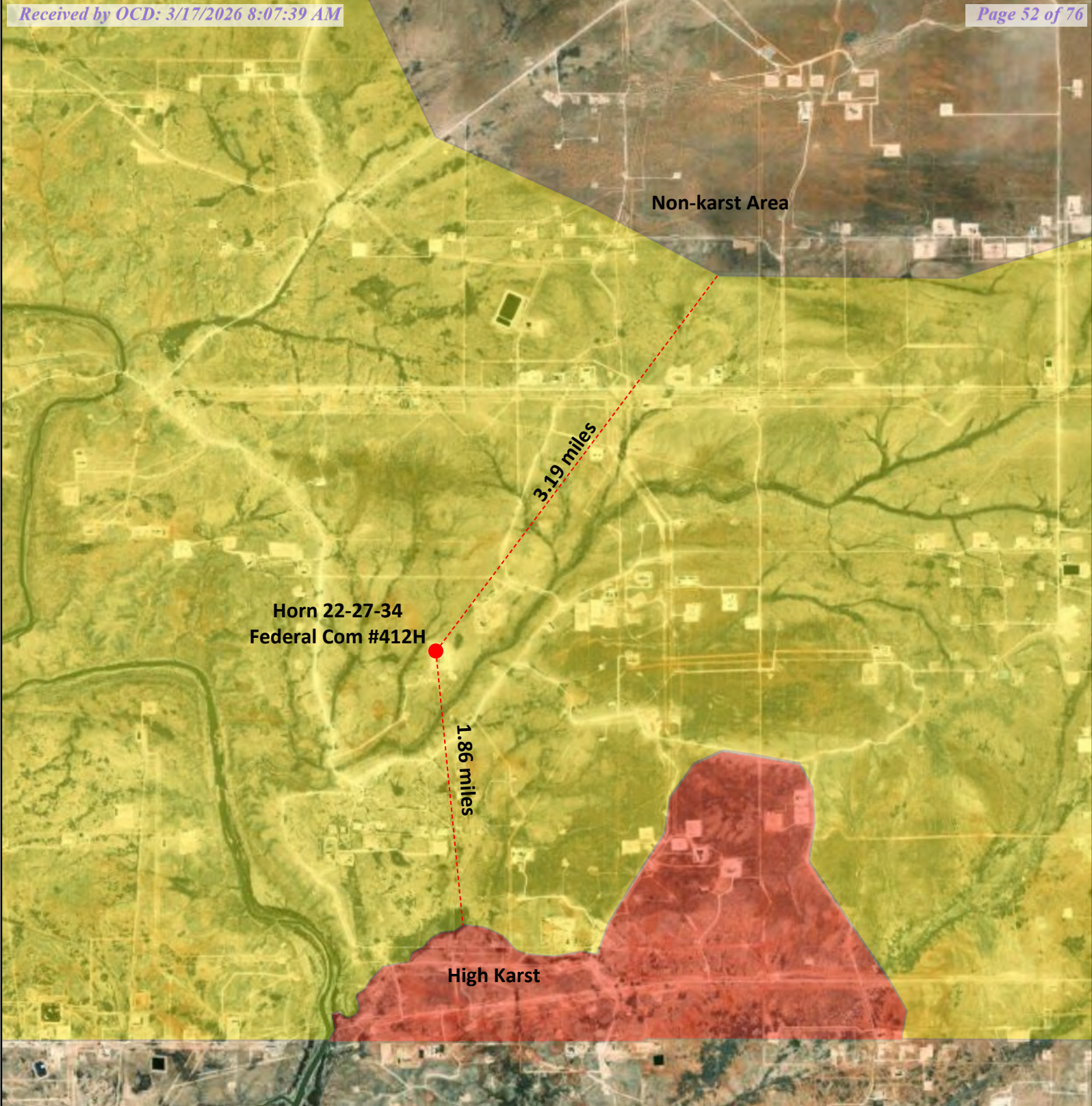
Citations  
 38m Resolution Metadata

**No Mines located  
 within 5-mile radius**

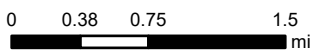


Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, New Mexico Environment

Monica Peppin



### Horn 22-27-34 Federal Com #412H



**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.

Released to Imaging: 3/30/2026 3:06:02 PM  
Map Created: 12/24/2025

--- User drawn lines

● User drawn points

Karst\_Potential\_NM

Potential

- Critical
- High
- Medium

**Horn 22 27 34 Federal Com #412H**

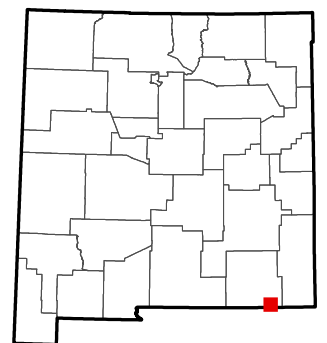
**Karst Potential  
Medium**

**Distance to Nonkarst**

**3.19 miles**

**Distance to High Karst**

**1.86 miles**



# National Flood Hazard Layer FIRMette

Horn 22 27 34 Federal Com #412H

Nearest Flood Zone: Zone A

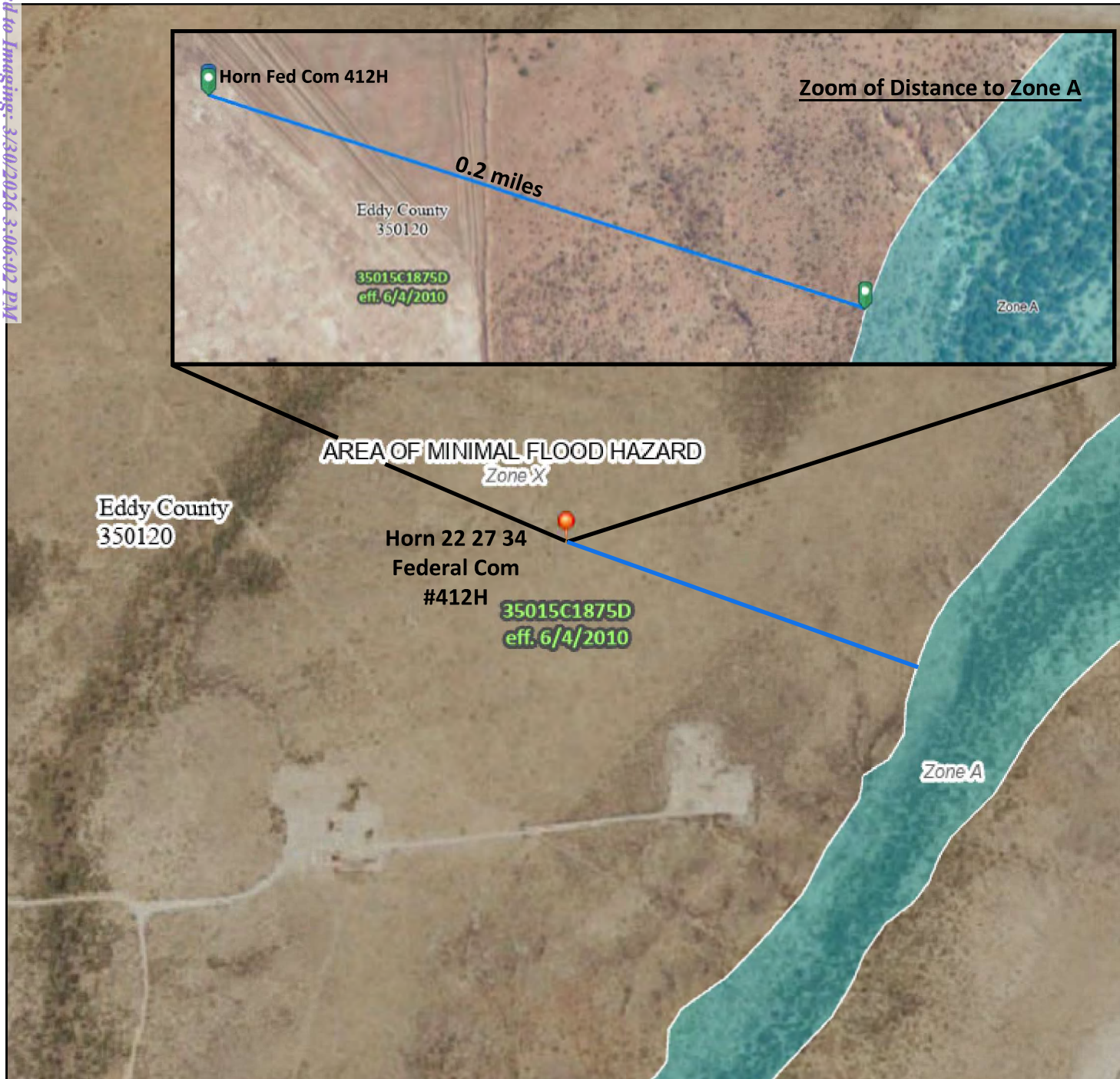
Distance: 0.20 miles

3°58'18"W 32°2'32"N



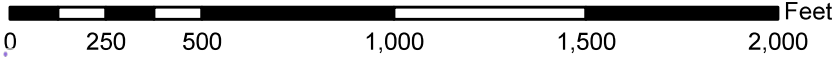
Released to Imaging: 3/30/2026 3:06:02 PM

Received by OCD: 3/17/2026 8:07:39 AM



## Legend

- SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
- |                                    |  |  |
|------------------------------------|--|--|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  |  | Without Base Flood Elevation (BFE)<br><i>Zone A, V, A99</i>  |
|                                    |  | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>   |
|                                    |  | Regulatory Floodway  |
| <b>OTHER AREAS OF FLOOD HAZARD</b> |  | 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 <i>Zone B</i> |
|                                    |  | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>  |
|                                    |  | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>  |
|                                    |  | Area with Flood Risk due to Levee <i>Zone X</i>  |
| <b>OTHER AREAS</b>                 |  | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>   |
|                                    |  | Effective LOMRs  |
|                                    |  | Area of Undetermined Flood Hazard <i>Zone D</i>  |
| <b>GENERAL STRUCTURES</b>          |  | Channel, Culvert, or Storm Sewer   |
|                                    |  | Levee, Dike, or Floodwall  |
| <b>OTHER FEATURES</b>              |  | <b>20.2</b> Cross Sections with 1% Annual Chance Water Surface Elevation   |
|                                    |  | <b>17.5</b> Water Surface Elevation  |
|                                    |  | Coastal Transect   |
|                                    |  | Base Flood Elevation Line (BFE)  |
|                                    |  | Limit of Study   |
|                                    |  | Jurisdiction Boundary  |
|                                    |  | Coastal Transect Baseline  |
|                                    |  | Profile Baseline   |
|                                    |  | Hydrographic Feature   |
| <b>MAP PANELS</b>                  |  | Digital Data Available   |
|                                    |  | No Digital Data Available  |
|                                    |  | Unmapped   |
|                                    |  | The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.                                     |



1:6,000

103°57'40"W 32°2'1"N

Basemap Imagery Source: USGS National Map 2023

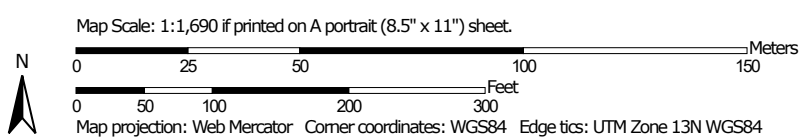
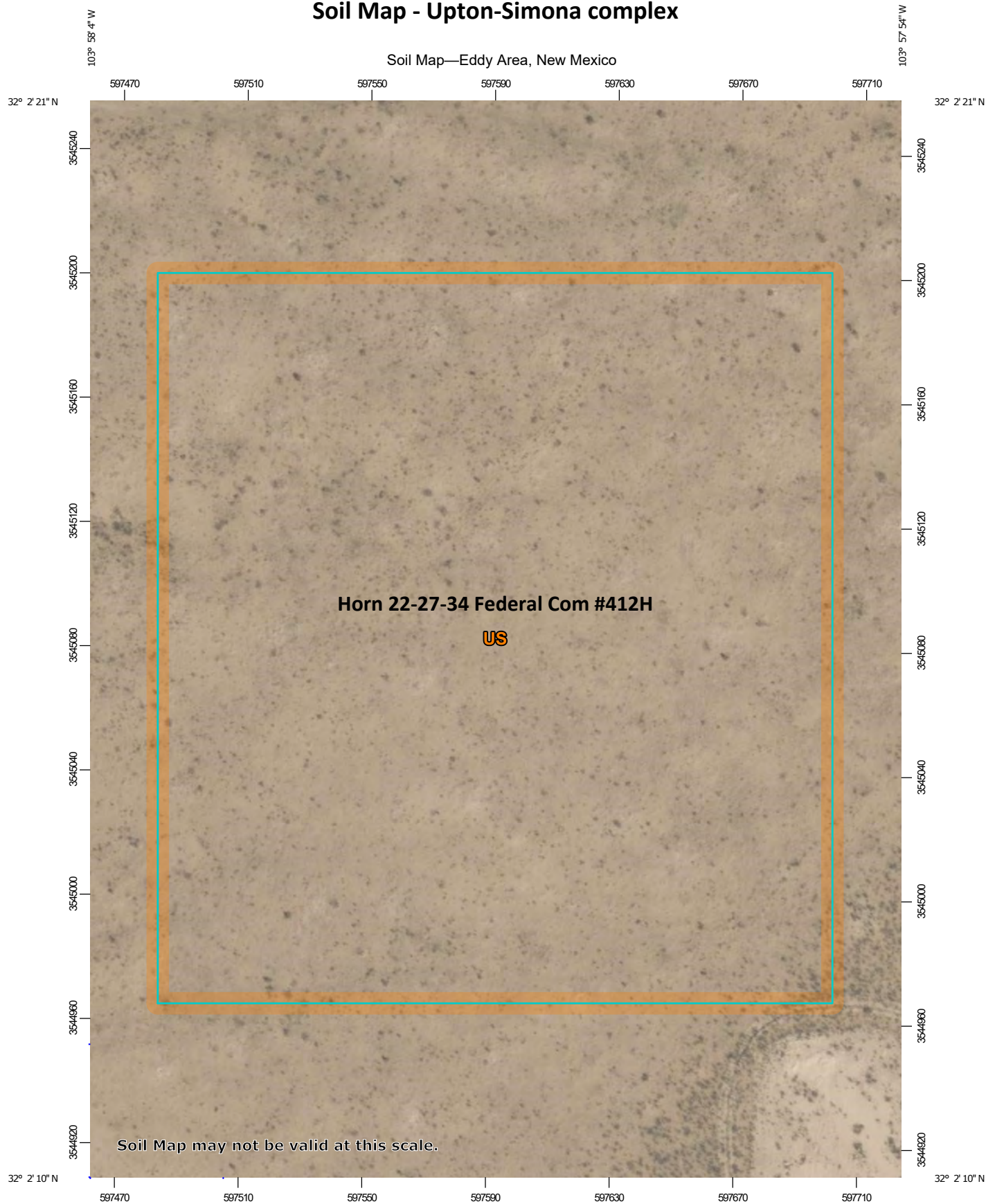
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/5/2026 at 4:13 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.

Page 53 of 76


# Horn 22-27-34 Federal Com #412H Soil Map - Upton-Simona complex



Soil Map—Eddy Area, New Mexico

**MAP LEGEND**

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**




-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

**Water Features**

 Streams and Canals

**Transportation**

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

**Background**

 Aerial Photography

**MAP INFORMATION**

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

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

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

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

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

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

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

Soil Survey Area: Eddy Area, New Mexico  
 Survey Area Data: Version 21, 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.

Soil Map—Eddy Area, New Mexico

---

## Map Unit Legend

| Map Unit Symbol                    | Map Unit Name  | Acres in AOI | Percent of AOI |
|------------------------------------|--|--------------|----------------|
| US                                 | Upton-Simona complex, 1 to 15 percent slopes, eroded | 12.7         | 100.0%         |
| <b>Totals for Area of Interest</b> |  | <b>12.7</b>  | <b>100.0%</b>  |

Map Unit Description: Upton-Simona complex, 1 to 15 percent slopes, eroded---Eddy Area,  
New Mexico

---

## Eddy Area, New Mexico

### US—Upton-Simona complex, 1 to 15 percent slopes, eroded

#### Map Unit Setting

*National map unit symbol:* 1w66  
*Elevation:* 2,000 to 5,700 feet  
*Mean annual precipitation:* 6 to 14 inches  
*Mean annual air temperature:* 57 to 70 degrees F  
*Frost-free period:* 180 to 260 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Upton and similar soils:* 40 percent  
*Simona and similar soils:* 35 percent  
*Minor components:* 25 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Upton

##### Setting

*Landform:* Fans, ridges  
*Landform position (three-dimensional):* Side slope, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from limestone

##### Typical profile

*H1 - 0 to 9 inches:* gravelly loam  
*H2 - 9 to 13 inches:* gravelly loam  
*H3 - 13 to 21 inches:* cemented  
*H4 - 21 to 60 inches:* very gravelly loam

##### Properties and qualities

*Slope:* 1 to 15 percent  
*Depth to restrictive feature:* 7 to 20 inches to petrocalcic  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately high (0.01 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 75 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Very low (about 1.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

Map Unit Description: Upton-Simona complex, 1 to 15 percent slopes, eroded---Eddy Area,  
New Mexico

---

*Land capability classification (nonirrigated): 7s*  
*Hydrologic Soil Group: D*  
*Ecological site: R070BC025NM - Shallow*  
*Hydric soil rating: No*

## Description of Simona

### Setting

*Landform: Alluvial fans, plains*  
*Landform position (three-dimensional): Rise*  
*Down-slope shape: Linear, convex*  
*Across-slope shape: Linear*  
*Parent material: Mixed alluvium and/or eolian sands*

### Typical profile

*H1 - 0 to 6 inches: gravelly fine sandy loam*  
*H2 - 6 to 20 inches: gravelly fine sandy loam*  
*H3 - 20 to 24 inches: indurated*

### Properties and qualities

*Slope: 1 to 5 percent*  
*Depth to restrictive feature: 7 to 20 inches to petrocalcic*  
*Drainage class: Well drained*  
*Runoff class: High*  
*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum content: 15 percent*  
*Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum: 1.0*  
*Available water supply, 0 to 60 inches: Very low (about 2.4 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: D*  
*Ecological site: R070BD002NM - Shallow Sandy*  
*Hydric soil rating: No*

## Minor Components

### Rock outcrop

*Percent of map unit: 9 percent*  
*Hydric soil rating: No*

### Pajarito

*Percent of map unit: 8 percent*  
*Ecological site: R070BD003NM - Loamy Sand*  
*Hydric soil rating: No*

### Dune land

*Percent of map unit: 8 percent*

Map Unit Description: Upton-Simona complex, 1 to 15 percent slopes, eroded---Eddy Area,  
New Mexico

---

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Eddy Area, New Mexico  
Survey Area Data: Version 21, Sep 9, 2025



# Ecological site R070BC025NM Shallow

Accessed: 12/24/2025

## 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 knolls, ridges, hillslopes alluvial fans and escarpments. Slopes range fro 0 to 25 percent and average about 7 percent. Direction of slope varies and is usually not significant. Elevations range from 2,842 to 4,500 feet.

**Table 2. Representative physiographic features**

|                    |   |
|--------------------|---|
| Landforms          | (1) Hill<br>(2) Ridge<br>(3) Fan piedmont |
| Flooding frequency | None                                      |
| Ponding frequency  | None                                      |
| Elevation          | 2,842–4,500 ft                            |
| Slope              | 25%                                       |

|        |                                    |
|--------|------------------------------------|
| Aspect | Aspect is not a significant factor |
|--------|------------------------------------|

## Influencing water features

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

## Soil features

The soils of this site are shallow to very shallow. Soils are derived from mixed calcareous eolian deposits derived from sedimentary rock. Surface layers are very cobbly loam, very gravelly loam, gravelly loam, cobbly loam, gravelly fine sandy loam or gravelly sandy loam.

There is an indurated caliche layer or limestone bedrock that occurs within 20 inches and averages less than 10 inches. Limestone or caliche layer may be the restrictive layer.

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

Characteristic soils:

- Lozier
- Potter
- Tencee
- Upton
- Ector
- Kimbrough

**Table 4. Representative soil features**

|                      |   |
|----------------------|---|
| Surface texture      | (1) Gravelly loam<br>(2) Extremely gravelly loam<br>(3) Extremely cobbly loam |
| Family particle size | (1) Loamy   |
| Drainage class       | Well drained  |

|                                       |                              |
|---------------------------------------|------------------------------|
| Permeability class                    | Very slow to moderately slow |
| Soil depth                            | 4–20 in                      |
| Surface fragment cover <=3"           | 15–40%                       |
| Available water capacity (0-40in)     | 1 in                         |
| Calcium carbonate equivalent (0-40in) | 15–60%                       |
| Electrical conductivity (0-40in)      | 2 mmhos/cm                   |

|   |         |
|---|---------|
| Sodium adsorption ratio (0-40in)                      | 1       |
| Soil reaction (1:1 water) (0-40in)                    | 7.4–8.4 |
| Subsurface fragment volume <=3" (Depth not specified) | 13–42%  |
| Subsurface fragment volume >3" (Depth not specified)  | 1%      |

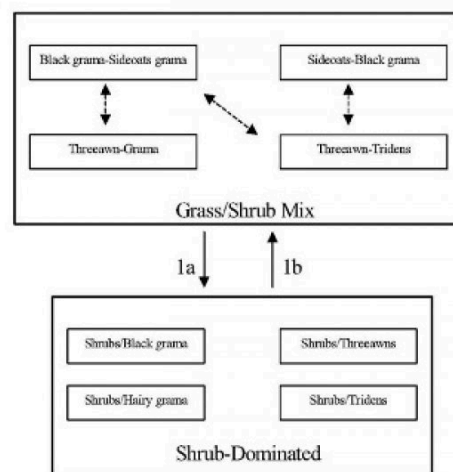
### Ecological dynamics

**Overview:**

The Shallow site is associated with and Limestone Hills, Loamy, and Shallow Sandy sites. When associated with Limestone Hills, the Shallow site occurs on the summits, foot slopes and toeslopes of hills. Loamy sites often occur as areas between low elongated hills with rounded crests (Shallow site). When the Shallow Sandy site and Shallow site occur in association, the Shallow Sandy soils occupy the tops of low ridges and the Shallow site soils occur on the steeper sideslopes of the ridge. The historic plant community of the Shallow site has the aspect of a grassland/shrub mix, dominated by grasses, but with shrubs common throughout the site. Black grama is the dominant grass species; creosotebush, mesquite, and catclaw mimosa are common shrubs. Overgrazing and or extended drought can reduce grass cover, effect a change in grass species dominance, and may result in a shrub-dominated state. 1

Plant Communities and Transitional Pathways (diagram)

MLRA-42, SD-3, Shallow



1a. Extended drought, overgrazing, no fire  
 1b. Brush control, Prescribed grazing

### State and transition model

#### State 1 Grass/Shrub Mix

##### Community 1.1 Grass/Shrub Mix

Grassland/Shrub Mix: The historic plant community is dominated by black grama with sideoats grama as the sub-dominant. Blue grama, hairy grama, bush muhly, and sand dropseed also occur in significant amounts. Sideoats grama can occur as the dominant grass with black grama as sub-dominant on the western side of the Land Resource Unit SD-3. This may be due to higher average elevation on the west side. Retrogression within this state due to extended drought or overgrazing will cause a decrease in species such as black grama, sideoats grama, blue grama, and bush muhly. Threeawns may become the dominant grass species due to a decline in

more palatable grasses or because of its ability to quickly recover following drought. Continued loss of grass cover and associated increase in amount of bare ground may result in a shrub-dominated state. Decreased fire frequencies may also be an important component in the cause of this transition. Diagnosis: Grass cover is fairly uniform, however, surface gravel, cobble, and bare ground make up a large percent of total ground cover, and grass production during unfavorable years may only average 150-175 pounds per acre. Shrubs are common with canopy cover averaging five to ten percent. Evidence of erosion such as rills and gullies are rare, but may occur on slopes greater than eight percent.

Table 5. Annual production by plant type

| Plant Type      | Low (Lb/Acre) | Representative Value (Lb/Acre) | High (Lb/Acre) |
|-----------------|---------------|--------------------------------|----------------|
| Grass/Grasslike | 168           | 352                            | 536            |
| Shrub/Vine      | 63            | 131                            | 200            |
| Forb            | 20            | 42                             | 64             |
| <b>Total</b>    | <b>251</b>    | <b>525</b>                     | <b>800</b>     |

Table 6. Ground cover

|                                   |        |
|-----------------------------------|--------|
| Tree foliar cover                 | 0%     |
| Shrub/vine/liana foliar cover     | 5-10%  |
| Grass/grasslike foliar cover      | 10-15% |
| Forb foliar cover                 | 0%     |
| Non-vascular plants               | 0%     |
| Biological crusts                 | 0%     |
| Litter                            | 5-8%   |
| Surface fragments >0.25" and <=3" | 0%     |
| Surface fragments >3"             | 0%     |
| Bedrock                           | 0%     |
| Water                             | 0%     |
| Bare ground                       | 40-60% |

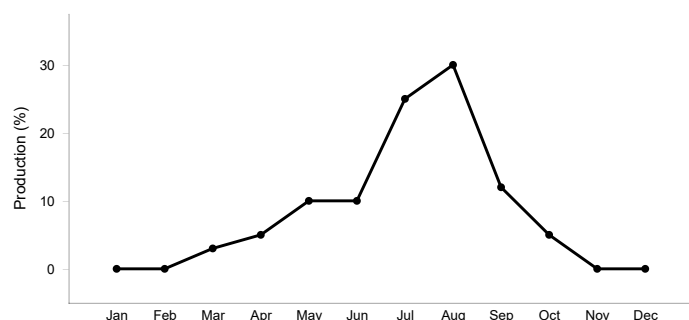


Figure 5. Plant community growth curve (percent production by month). NM2825, R042XC025NM Shallow HCPC. R042XC025NM Shallow HCPC Warm Season Plant Community.

## State 2 Shrub-Dominated

### Community 2.1 Shrub-Dominated

Shrub-Dominated: This state is characterized by an increase in shrubs and a decrease in grass cover relative to grassland/shrub mix. As grass cover decreases shrubs increase, especially creosotebush, catclaw mimosa, whitethorn acacia, and mesquite. Each of these shrub species may become dominant in localized areas or across the site, depending on the spatial variability in soil characteristics and landscape position. Black grama, threeawns, hairy grama, or hairy tridens may be the dominant grass species. Fluffgrass, burrograss and broom snakeweed increase in representation. The Shallow site is resistant to state change, due to the natural rock armor of the soil and a shallow impermeable layer. The amount of rock fragments on the soil surface assist in retarding erosion. On Shallow sites with low slope, the shallow depth to either a petrocalcic layer or limestone bedrock helps to keep water perched and available to shallow rooted grasses for extended periods. 2 Diagnosis: Shrubs are the dominant species, especially creosotebush, catclaw mimosa, whitethorn acacia, or mesquite. Grass cover is variable ranging from patchy with large connected bare areas present to sparse with only a limited amount in shrub inter-spaces. Transition to Shrub-Dominated (1a) Overgrazing and or extended periods of drought, and suppression of natural fire regimes are thought to cause this transition. As grass cover is lost, soil fertility and available soil moisture decline, due to the reduction of organic matter and decreased infiltration.3 Shrubs have the ability to extract nutrients and water from a greater area of soil than grasses and are better able to utilize limited water. Competition by shrubs for water and nutrients limits grass recruitment and establishment. Fire historically may have played a part in suppressing shrub expansion; fire suppression may therefore facilitate shrub expansion. Key indicators of approach to transition: \*Decrease or change in composition or distribution of grass cover. \*Increase in size and frequency of bare patches. \*Increase in amount of shrub seedlings. Transition back to Grassland/Shrub Mix (1b) Brush control is necessary to re-establish grasses. Prescribed grazing will help to ensure proper forage utilization and sustain grass cover. Once the transition is reversed and grass cover is re-established,

periodic use of prescribed fire may assist in maintaining the Grassland/Shrub state.

## Additional community tables

Table 7. Community 1.1 plant community composition

| Group                  | Common Name               | Symbol | Scientific Name                           | Annual Production (Lb/Acre) | Foliar Cover (%) |
|------------------------|---------------------------|--------|---|-----------------------------|------------------|
| <b>Grass/Grasslike</b> |                           |        |   |                             |                  |
| 1                      |                           |        |   | 105–158                     |                  |
|                        | black grama               | BOER4  | <i>Bouteloua eriopoda</i>                 | 105–158                     | –                |
| 2                      |                           |        |   | 79–105                      |                  |
|                        | sideoats grama            | BOCU   | <i>Bouteloua curtipendula</i>             | 79–105                      | –                |
| 3                      |                           |        |   | 79–105                      |                  |
|                        | blue grama                | BOGR2  | <i>Bouteloua gracilis</i>                 | 79–105                      | –                |
|                        | hairy grama               | BOHI2  | <i>Bouteloua hirsuta</i>                  | 79–105                      | –                |
| 4                      |                           |        |   | 26–53                       |                  |
|                        | bush muhly                | MUPO2  | <i>Muhlenbergia porteri</i>               | 26–53                       | –                |
| 5                      |                           |        |   | 16–26                       |                  |
|                        | cane bluestem             | BOBA3  | <i>Bothriochloa barbinodis</i>            | 16–26                       | –                |
| 6                      |                           |        |   | 26–53                       |                  |
|                        | sand dropseed             | SPCR   | <i>Sporobolus cryptandrus</i>             | 26–53                       | –                |
| 7                      |                           |        |   | 16–26                       |                  |
|                        | hairy woollygrass         | ERPI5  | <i>Erioneuron pilosum</i>                 | 16–26                       | –                |
| 8                      |                           |        |   | 5–16                        |                  |
|                        | ear muhly                 | MUAR   | <i>Muhlenbergia arenacea</i>              | 5–16                        | –                |
| 9                      |                           |        |   | 5–16                        |                  |
|                        | New Mexico feathergrass   | HENE5  | <i>Hesperostipa neomexicana</i>           | 5–16                        | –                |
| 10                     |                           |        |   | 5–16                        |                  |
|                        | low woollygrass           | DAPU7  | <i>Dasyochloa pulchella</i>               | 5–16                        | –                |
| 11                     |                           |        |   | 16–26                       |                  |
|                        | Grass, perennial          | 2GP    | <i>Grass, perennial</i>                   | 16–26                       | –                |
| <b>Forb</b>            |                           |        |   |                             |                  |
| 12                     |                           |        |   | 11–26                       |                  |
|                        | stemless four-nerve daisy | TEACE  | <i>Tetraneuris acaulis var. epunctata</i> | 11–26                       | –                |
| 13                     |                           |        |   | 5–16                        |                  |
|                        | woolly groundsel          | PACA15 | <i>Packera cana</i>                       | 5–16                        | –                |
| 14                     |                           |        |   | 5–16                        |                  |
|                        | globemallow               | SPHAE  | <i>Sphaeralcea</i>                        | 5–16                        | –                |
| 15                     |                           |        |   | 5–16                        |                  |
|                        | bladderpod                | LESQU  | <i>Lesquerella</i>                        | 5–16                        | –                |
| 16                     |                           |        |   | 5–16                        |                  |
|                        | cassia                    | CASSI  | <i>Cassia</i>                             | 5–16                        | –                |

|                   |   |        |  |       |   |
|-------------------|---|--------|--|-------|---|
| 17                |   |        |  | 11-26 |   |
|                   | Forb (herbaceous, not grass nor grass-like) | 2FORB  | <i>Forb (herbaceous, not grass nor grass-like)</i> | 11-26 | - |
| <b>Shrub/Vine</b> |   |        |  |       |   |
| 18                |   |        |  | 5-16  |   |
|                   | littleleaf sumac                            | RHMI3  | <i>Rhus microphylla</i>                            | 5-16  | - |
| 19                |   |        |  | 5-16  |   |
|                   | creosote bush                               | LATR2  | <i>Larrea tridentata</i>                           | 5-16  | - |
| 20                |   |        |  | 5-16  |   |
|                   | littleleaf ratany                           | KRER   | <i>Krameria erecta</i>                             | 5-16  | - |
| 21                |   |        |  | 5-16  |   |
|                   | javelina bush                               | COER5  | <i>Condalia ericoides</i>                          | 5-16  | - |
| 22                |   |        |  | 5-16  |   |
|                   | American tarwort                            | FLCE   | <i>Flourensia cernua</i>                           | 5-16  | - |
| 23                |   |        |  | 5-16  |   |
|                   | crown of thorns                             | KOSP   | <i>Koeberlinia spinosa</i>                         | 5-16  | - |
| 24                |   |        |  | 11-26 |   |
|                   | honey mesquite                              | PRGL2  | <i>Prosopis glandulosa</i>                         | 11-26 | - |
|                   | honey mesquite                              | PRGL2  | <i>Prosopis glandulosa</i>                         | 11-26 | - |
| 25                |   |        |  | 5-16  |   |
|                   | catclaw mimosa                              | MIACB  | <i>Mimosa aculeaticarpa var. biuncifera</i>        | 5-16  | - |
| 26                |   |        |  | 5-16  |   |
|                   | pricklypear                                 | OPUNT  | <i>Opuntia</i>                                     | 5-16  | - |
| 27                |   |        |  | 11-26 |   |
|                   | mariola                                     | PAIN2  | <i>Parthenium incanum</i>                          | 11-26 | - |
|                   | mariola                                     | PAIN2  | <i>Parthenium incanum</i>                          | 11-26 | - |
| 28                |   |        |  | 5-16  |   |
|                   | broom snakeweed                             | GUSA2  | <i>Gutierrezia sarothrae</i>                       | 5-16  | - |
| 29                |   |        |  | 16-26 |   |
|                   | Shrub (>.5m)                                | 2SHRUB | <i>Shrub (&gt;.5m)</i>                             | 16-26 | - |

## Animal community

This site provides habitats which support a resident animal community that is characterized by desert cottontail, spotted ground squirrel, Merriam's kangaroo rat, cactus mouse, white-throated woodrat, gray fox, spotted skunk, roadrunner, Swainson's hawk, white-necked raven, cactus wren, pyrrhuloxia, lark sparrow, mourning dove, scaled quail, leopard lizard, round-tailed horned lizard, prairie rattlesnake, marbled whiptail, and greater earless lizard. Where associated with limestone hills, mule deer utilize this site.

Where large woody shrubs occur, most resident birds and scissor-tailed flycatcher, morning dove, lark sparrow and Swainson's hawk nest.

## 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

Lozier----- D

Potter----- C

Tencee----- D

Upton----- C

Kimbrough----- D

Upton----- D

Ector----- D

**Recreational uses**

This site offers recreation potential for hiking, horseback riding, rock hunting, nature photography and bird hunting and birding. During years of abundant spring moisture, a colorful array of wild flowers is displayed during May and June. A few summer and fall flowers also occur.

**Wood products**

This site has no potential for wood production.

**Other products**

This site is suited for grazing by all kinds and classes of livestock during all seasons of the year. Missmanagement will cause a decrease in black grama, sideoats grama, and blue grama, bush muhly and New Mexico feathergrass. A corresponding increase in bare ground will occur. There will also be an increase in muhlys, fluffgrass, creosotebush, javalinabush, catclaw, and mesquite. This site will respond best to a system of management that rotates the season of use.

**Other information**

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index----- Ac/AUM

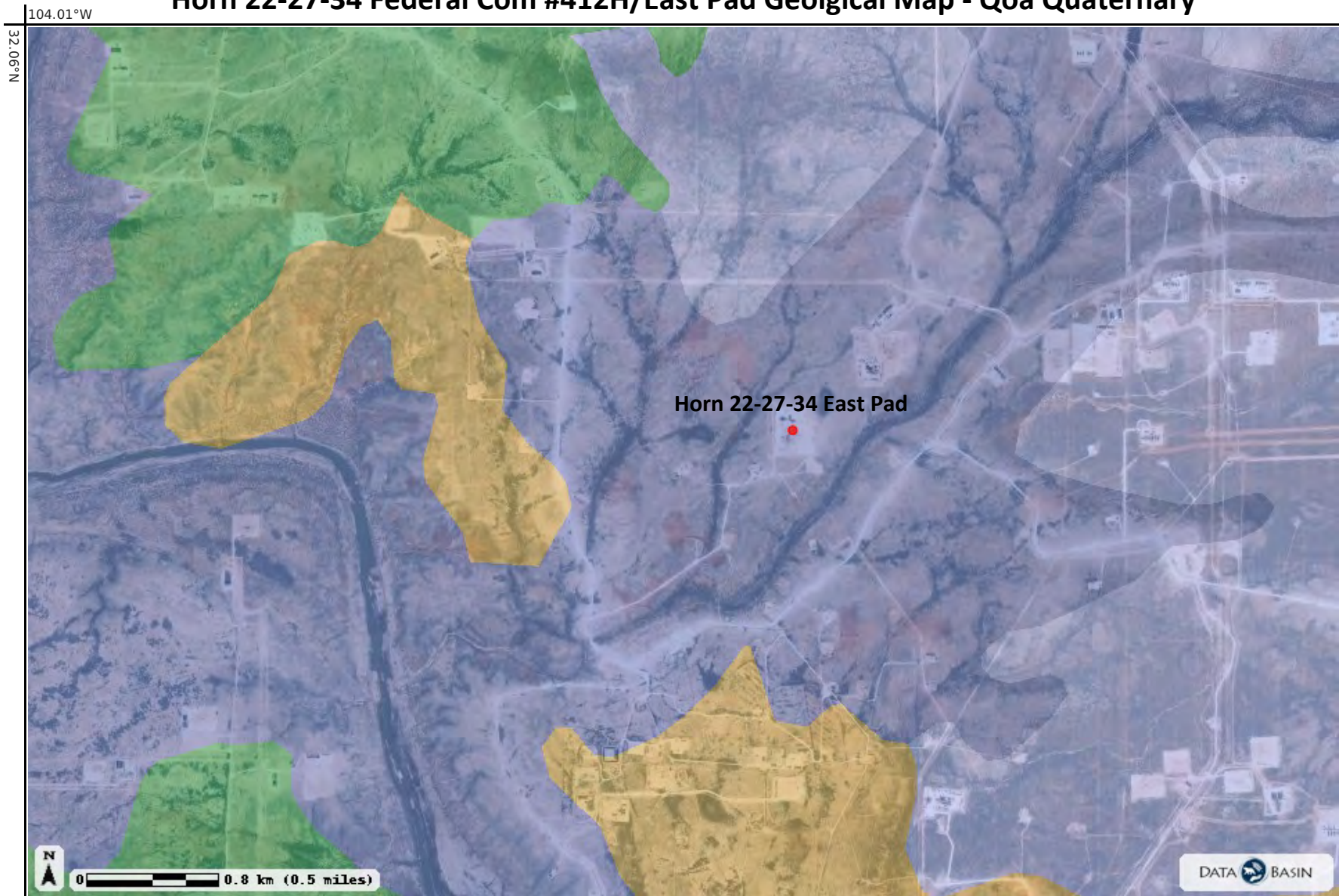
100 - 76----- 3.7 – 4.5

75 – 51----- 4.3 – 5.5

50 – 26----- 5.3 – 10.0

25 – 0----- 10.1 +

# Horn 22-27-34 Federal Com #412H/East Pad Geological Map - Qoa Quaternary

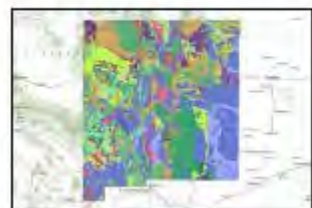


## Legend

### Geology of New Mexico, USA

- alluvium
- andesite
- basalt
- carbonate
- clastic
- clay or mud
- coarse-grained mixed clastic
- conglomerate
- eolian
- evaporite
- felsic metavolcanic rock
- felsic volcanic rock
- fine-grained mixed clastic
- granodiorite
- indeterminate
- lake or marine deposit (non-glacial)
- landslide
- lava flow
- limestone
- mafic metavolcanic rock
- medium-grained mixed clastic
- metamorphic rock
- metasedimentary rock
- mudstone
- playa
- plutonic rock (phaneritic)
- pyroclastic
- quartz monzonite
- rhyolite
- sandstone
- sedimentary rock
- shale
- till
- tuff
- unconsolidated deposit
- volcanic rock (aphanitic)
- water

## Datasets



### Geology of New Mexico, USA

<https://databasin.org/datasets/216c664011134afabb351937aff06f6d/>

**Credits:** Douglas B. Stoesser, Gregory N. Green, Laurie C. Morath, William D. Heran, Anna B. Wilson, David W. Moore, Bradley S. Van Gosen  
**Layers:** • Geology of New Mexico, USA



• -103.96638° Longitude, 32.03797° Latitude

## APPENDIX C

## CORRESPONDENCE



---

**RE: [EXTERNAL] Horn 22 27 37 Federal Com #412H Liner Inspection Notification  
nAPP2534540759/nAPP2535875277/nAPP2602732510**

---

**From** Raley, Jim <jim.rale@dn.com>  
**Date** Mon 2026-02-23 12:17 PM  
**To** Monica Peppin <Monica.Peppin@kljeng.com>  
**Cc** Will Harmon <will.harmon@kljeng.com>

**Submitted for 25th**

Jim Raley | Environmental Professional - Permian Basin  
5315 Buena Vista Dr., Carlsbad, NM 88220  
C: (575)689-7597 | [jim.rale@dn.com](mailto:jim.rale@dn.com)



---

**From:** Monica Peppin <Monica.Peppin@kljeng.com>  
**Sent:** Monday, February 23, 2026 9:24 AM  
**To:** Raley, Jim <Jim.Raley@dn.com>  
**Cc:** Will Harmon <will.harmon@kljeng.com>  
**Subject:** Re: [EXTERNAL] Horn 22 27 37 Federal Com #412H Liner Inspection Notification  
nAPP2534540759/nAPP2535875277/nAPP2602732510

Yes sir. Whichever is best. I will update my end.

Thank you,  
Monica

---

**From:** Raley, Jim <[Jim.Raley@dn.com](mailto:Jim.Raley@dn.com)>  
**Sent:** Monday, February 23, 2026 6:47 AM  
**To:** Monica Peppin <[Monica.Peppin@kljeng.com](mailto:Monica.Peppin@kljeng.com)>  
**Cc:** Will Harmon <[will.harmon@kljeng.com](mailto:will.harmon@kljeng.com)>  
**Subject:** RE: [EXTERNAL] Horn 22 27 37 Federal Com #412H Liner Inspection Notification  
nAPP2534540759/nAPP2535875277/nAPP2602732510

**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.

I mean 25th

Jim Raley | Environmental Professional - Permian Basin  
5315 Buena Vista Dr., Carlsbad, NM 88220  
C: (575)689-7597 | [jim.rale@dn.com](mailto:jim.rale@dn.com)



**From:** Raley, Jim  
**Sent:** Monday, February 23, 2026 6:41 AM  
**To:** Monica Peppin <[Monica.Peppin@kljeng.com](mailto:Monica.Peppin@kljeng.com)>  
**Cc:** Will Harmon <[will.harmon@kljeng.com](mailto:will.harmon@kljeng.com)>  
**Subject:** RE: [EXTERNAL] Horn 22 27 37 Federal Com #412H Liner Inspection Notification  
 nAPP2534540759/nAPP2535875277/nAPP2602732510

Will 24<sup>th</sup> work

Jim Raley | Environmental Professional - Permian Basin  
 5315 Buena Vista Dr., Carlsbad, NM 88220  
 C: (575)689-7597 | [jim.rale@devon.com](mailto:jim.rale@devon.com)



**From:** Monica Peppin <[Monica.Peppin@kljeng.com](mailto:Monica.Peppin@kljeng.com)>  
**Sent:** Friday, February 20, 2026 10:38 AM  
**To:** Raley, Jim <[Jim.Raley@devon.com](mailto:Jim.Raley@devon.com)>  
**Cc:** Will Harmon <[will.harmon@kljeng.com](mailto:will.harmon@kljeng.com)>  
**Subject:** [EXTERNAL] Horn 22 27 37 Federal Com #412H Liner Inspection Notification  
 nAPP2534540759/nAPP2535875277/nAPP2602732510

Jim,

Below is the liner inspection notification for the Horn Fed Com #412H for three incidents that occurred within the tank battery and separator/burner secondary containments. If you have any questions or need to make any adjustments to the time and date, just let me know.

**Liner Inspection**

|   |  |
|---|--|
| What is the liner inspection surface area in square feet  | 17,031   |
| 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 | 2/24/2026  |
| Time liner inspection will commence   | 0100PM   |
| 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                        | 32.03797, -103.966386                              |
| Incidents   | nAPP2534540759<br>nAPP2535875277<br>nAPP2602732510 |

Thank you,  
Monica

Monica Peppin, A.S.  
Environmental Specialist II



575-213-9010 Direct

575-909-3418 Cell

Carlsbad, NM 88220

[kljeng.com](http://kljeng.com)

 [Book time to meet with me](#)

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

General Information  
Phone: (505) 629-6116

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

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

QUESTIONS

Action 563530

**QUESTIONS**

|  |   |
|--|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289  |
|  | Action Number:<br>563530  |
|  | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

|                      |  |
|----------------------|--|
| <b>Prerequisites</b> |  |
| Incident ID (n#)     | nAPP2535875277   |
| Incident Name        | NAPP2535875277 HORN 22-27-34 EAST PAD @ FAPP2332566148 |
| Incident Type        | Produced Water Release                                 |
| Incident Status      | Remediation Closure Report Received                    |
| Incident Facility    | [fAPP2332566148] HORN 22-27-34 EAST PAD                |

|   |                        |
|---|------------------------|
| <b>Location of Release Source</b>                     |                        |
| <i>Please answer all the questions in this group.</i> |                        |
| Site Name   | HORN 22-27-34 EAST PAD |
| Date Release Discovered                               | 12/20/2025             |
| Surface Owner   | Federal                |

|  |                        |
|--|------------------------|
| <b>Incident Details</b>  |                        |
| <i>Please answer all the questions in this group.</i>  |                        |
| 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                     |

|   |   |
|---|---|
| <b>Nature and Volume of Release</b>   |   |
| <i>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.</i> |   |
| Crude Oil Released (bbls) Details   | Not answered.   |
| Produced Water Released (bbls) Details  | Cause: Corrosion   Dump Line   Produced Water   Released: 30 BBL   Recovered: 30 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)  | Ball valve developed pinhole leak. Major notification made via email on 12/21/2025                  |

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

General Information  
Phone: (505) 629-6116

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

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

QUESTIONS, Page 2

Action 563530

**QUESTIONS (continued)**

|  |   |
|--|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289  |
|  | Action Number:<br>563530  |
|  | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

|  |  |
|--|--|
| <b>Nature and Volume of Release (continued)</b>  |  |
| Is this a gas only submission (i.e. only significant Mcf values reported)  | <b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>   |
| Was this a major release as defined by Subsection A of 19.15.29.7 NMAC   | <b>Yes</b>   |
| Reasons why this would be considered a submission for a notification of a major release  | <b>From paragraph A. "Major release" determine using:<br/>(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.</b> |
| <i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i> |  |

**Initial Response**

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.*

|  |               |
|--|---------------|
| The source of the release has been stopped   | True          |
| The impacted area has been secured to protect human health and the environment                                     | True          |
| Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices | True          |
| All free liquids and recoverable materials have been removed and managed appropriately                             | True          |
| If all the actions described above have not been undertaken, explain why   | 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<br>Title: EHS Professional<br>Email: jim.raley@dvn.com<br>Date: 03/17/2026 |
|--|--|

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

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

QUESTIONS, Page 3

Action 563530

**QUESTIONS (continued)**

|  |   |
|--|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289  |
|  | Action Number:<br>563530  |
|  | Action Type:<br>[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                             |
| <b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>   |                                |
| A continuously flowing watercourse or any other significant watercourse  | Between 500 and 1000 (ft.)     |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)  | Between 500 and 1000 (ft.)     |
| 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 ½ and 1 (mi.)          |
| Any other fresh water well or spring   | Between ½ and 1 (mi.)          |
| Incorporated municipal boundaries or a defined municipal fresh water well field  | Greater than 5 (mi.)           |
| A wetland  | Between 500 and 1000 (ft.)     |
| A subsurface mine  | Greater than 5 (mi.)           |
| An (non-karst) unstable area   | Greater than 5 (mi.)           |
| Categorize the risk of this well / site being in a karst geology   | Medium                         |
| A 100-year floodplain  | Between 1000 (ft.) and ½ (mi.) |
| Did the release impact areas not on an exploration, development, production, or storage site                               | No                             |

**Remediation Plan**

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

|  |            |
|--|------------|
| Requesting a remediation plan approval with this submission  | Yes        |
| <i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>   |            |
| Have the lateral and vertical extents of contamination been fully delineated   | Yes        |
| Was this release entirely contained within a lined containment area  | Yes        |
| <i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i> |            |
| On what estimated date will the remediation commence   | 02/25/2026 |
| On what date will (or did) the final sampling or liner inspection occur  | 02/25/2026 |
| On what date will (or was) the remediation complete(d)   | 02/25/2026 |
| What is the estimated surface area (in square feet) that will be remediated  | 17091      |
| 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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QUESTIONS, Page 4

Action 563530

**QUESTIONS (continued)**

|  |   |
|--|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289  |
|  | Action Number:<br>563530  |
|  | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

|  |  |
|--|--|
| <b>Remediation Plan (continued)</b>  |  |
| <i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>   |  |
| <b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>   |  |
| <i>(Select all answers below that apply.)</i>  |  |
| Is (or was) there affected material present needing to be removed  | Yes  |
| Is (or was) there a power wash of the lined containment area (to be) performed   | No   |
| OTHER (Non-listed remedial process)  | Not answered.  |
| <i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>   |  |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. |  |
| I hereby agree and sign off to the above statement   | Name: James Raley<br>Title: EHS Professional<br>Email: jim.raley@dmn.com<br>Date: 03/17/2026 |
| <i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>  |  |

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QUESTIONS, Page 6

Action 563530

**QUESTIONS (continued)**

|  |   |
|--|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289  |
|  | Action Number:<br>563530  |
|  | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| <b>Liner Inspection Information</b>   |                   |
|---|-------------------|
| Last liner inspection notification (C-141L) recorded  | <b>556756</b>     |
| Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC | <b>02/25/2026</b> |
| Was all the impacted materials removed from the liner   | <b>Yes</b>        |
| What was the liner inspection surface area in square feet   | <b>17301</b>      |

| <b>Remediation Closure Request</b>  |                                  |
|---|----------------------------------|
| <i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i> |                                  |
| Requesting a remediation closure approval with this submission  | <b>Yes</b>                       |
| Have the lateral and vertical extents of contamination been fully delineated  | <b>Yes</b>                       |
| Was this release entirely contained within a lined containment area   | <b>Yes</b>                       |
| What was the total surface area (in square feet) remediated   | <b>17091</b>                     |
| What was the total volume (cubic yards) remediated  | <b>0</b>                         |
| Summarize any additional remediation activities not included by answers (above)   | <b>Pressure Washing Complete</b> |

*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<br>Title: EHS Professional<br>Email: jim.raley@dmv.com<br>Date: 03/17/2026 |
|--|--|

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CONDITIONS

Action 563530

**CONDITIONS**

|  |   |
|--|---|
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|  | Action Number:<br>563530  |
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**CONDITIONS**

| Created By | Condition  | Condition Date |
|------------|--|----------------|
| nvelez     | Liner inspection approved, release resolved. Restoration complete. | 3/30/2026      |