



January 30, 2025

5E33088 BG#8

EMNRD – Oil Conservation Division
506 W. Texas Ave
Artesia, NM 88210

SUBJECT: Closure Request Report for the Horned Viper 20 Federal Com #001H, Incident ID # nAPP2432327226, API Number 30-025-41913, Lea County, New Mexico

1.0 Introduction

On behalf of Devon Energy Production Company, LP (Devon), Souder, Miller & Associates (SMA) has prepared this Closure Request Report. This report describes the corrective actions for a produced water incident related to oil and gas production activities at the Horned Viper 20 Federal Com #001H (Horned Viper), Incident ID nAPP2432327226, that occurred on November 14, 2024. The spill area is located at latitude N 32.283600 and longitude W -103.598106.

Devon completed a release notification to the New Mexico Energy, Minerals, and Natural Resources Department – Oil Conservation Division (OCD) via email on November 15, 2024, and on the Operators Electronic Permitting and Payment Portal on November 18, 2024, for the submission of Notice of Release (NOR), followed by the submission of the Form C-141, Release Notification on November 18, 2024. This letter provides a description of the incident assessment and includes a request for spill closure.

Table 1: Release Information and Closure Criteria			
Name	Horned Viper 20 Federal Com #001H	Company	Devon Energy Production Company, LP
API Number	30-025-41913	Location	N-20-23S-33E N 32.283600, W -103.598106
Incident Number	nAPP2432327226	Land Status	Private
Date of Release	November 14, 2024	County	Lea
Source of Release	Gasket on water transfer pump failed		
Released Volume	24 bbls	Recovered Volume	24 bbls
NMOCD Closure Criteria	Depth to groundwater >101 feet below ground surface (bgs)		

2.0 Background

On November 14, 2024, a leak was found on the piping located within the secondary containment at the Horned Viper. The total volume of released fluids was 24 barrels (bbls) of produced water. The release occurred within the secondary lined containment at Horned Viper. Initial response activities were conducted by the operator, including source elimination, photographs of standing fluids, recovery of approximately 24 bbls of produced water, and verification that the affected area was properly exposed and cleaned for visual observation. Documentation of the liner inspection, including photographs, is provided in the Site Assessment Report and Photolog in Attachment 1.

3.0 Site Geology and Vegetation

The Geologic Map of New Mexico by New Mexico Bureau of Geology and Mineral Resources indicates the surface geology at the incident location area is comprised of primarily Qep – Eolian and piedmont deposits (Holocene to middle Pleistocene), interlayered eolian sands and piedmont-slope deposits.

The surrounding geography and terrain are associated with uplands, dunes, fan piedmonts, and inter-dunal areas, at elevations between 2,800 and 5,000 feet above mean sea level (amsl). The annual average rainfall and precipitation ranges between 8 to 13 inches. The soils in the release location area are moderately deep or very deep with surface textures consisting of loamy fine sand, fine sandy loam, very fine sand, or gravelly sandy loam. Subsurface features consist of loamy fine sand, fine sandy loam, or loam that averages less than 18 percent clay and less than 15 percent carbonates.

Substratum is a fine sandy loam or gravelly loam with less than 15 percent gravel and with less than 40 percent calcium carbonate while some layers that are high in lime or with caliche fragments may occur at depths of 20 to 30 inches. These soils will become wind-blown and form low hummocks if unprotected by plant coverage or organic residue.

This type of soil tends to be well drained, with negligible to very low runoff, and low available water supply. Some properties of these soils depict that they range from very low, moderately low, or have a high capacity to transmit water through the most limiting layer and have no frequency of flooding or ponding.

The ecological setting is vegetation of a grassland dominated by black grama, dropseeds, and bluestems. Sand sage and shinnery oak are evenly dispersed due to the coarse soil surface texture. Perennial and annual forbs are common but are reflective of precipitation. The grass/shrub state is composed of grass/honey mesquite, grasses/broom snakeweed, or grasses/sand sage.

4.0 Site Information and Closure Criteria

The Horned Viper is located approximately 25.62 miles northwest of Jal, New Mexico, on private land at an elevation of approximately 3,707 feet amsl. SMA completed site assessment/characterization pursuant to 19.5.29.11-12 NMAC to determine potential environmental impacts and closure criteria. Site assessment and characterization results are included in Attachments 1 and 2.

There is no surface water located on site or within closure criteria parameters of the site. The nearest significant watercourse, lakebed, and wetland, as defined in 19.15.17.7.P NMAC, is a riverine located approximately 1.58 miles northeast, a playa lake/freshwater pond located 3.65 miles, and a freshwater emergent wetland located 3.37 miles southeast from the site (U.S. Fish and Wildlife Service, National Wetlands Inventory, 2024) (Google Earth, 2024). There are no continuous flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes, or other critical water or community features within the specified search distances outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

Depth to ground water was determined using New Mexico Office of the State Engineer (NMOSE) Water Rights Pod Location: ArcGIS Interactive Online Map. The nearest active pod is C-02277, a commercial freshwater well, located 0.43 miles from Horned Viper with a depth to groundwater of 400 feet. A livestock freshwater well, Pod C-03562-POD1, is located 1.34 miles northeast of Horned Viper.

Karst potential for the area that Horned Viper is low, based on the New Mexico State Land Office Land Status Interactive Map (NMSLO) and is located 12.6 miles from a medium karst potential area.

The closure criteria for the site are the constituent concentration limits associated with greater than 101 feet depth to groundwater (DTGW) as stated in Table 1 of 19.15.29.12 NMAC.

According to FEMA's National Flood Hazard Layer, the Horned Viper is located in Zone D, an undetermined flood zone or unstudied area. The nearest mapped 100-year floodplain is located more than five miles from the site.

Documentation of site characterization, including surface water features, depth to groundwater, nearest residence, unstable areas, and flood zone, is included in Attachment 2.

5.0 Remediation Activities

Notification of the liner inspection, scheduled for December 12, 2024, was provided to Devon through email by SMA personnel on December 10, 2024. Devon provided notification to NMOCD through the ENMRD Electronic Permitting and Payment Portal for Operators on December 10, 2024. Notification of correspondence is included in Attachment 3.

On December 12, 2024, SMA personnel performed an on-site visual inspection of the secondary containment to verify liner integrity as outlined in Paragraph (5)(a) of Subsection A of 19.15.29.11 NMAC.

Visual observation of the liner included a complete inspection of all sidewalls and the base of the containment, around equipment, and all seams of the liner. The inspection included looking for any potential perforations in the liner that could lead to a breach of the secondary containment. Observations concluded no signs of any cuts, rips, tears, or weathering of the liner condition which need repairs or replacement. Liner integrity was confirmed. Photo documentation of the liner inspection is in the Site Assessment Report and Photolog (Attachment 1).

6.0 Conclusions and Recommendations

Based on the liner inspection and assessment, SMA concludes the liner integrity is adequate to contain the release related to incident nAPP2432327226. There is no evidence of a release or any risk to the environment. Based on the professional activities and site assessment, Devon Energy Production Company respectfully requests closure of the incident that occurred at Horned Viper 20 Federal Com #001H.

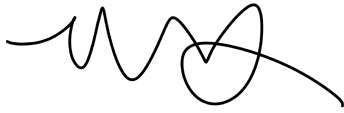
7.0 Scope and Limitations

The scope of our services included: visual inspection for liner integrity, regulatory liaison, and preparing this report. All work has been performed in accordance with accepted professional environmental consulting practices for oil and gas incidents in the Permian Basin in New Mexico.

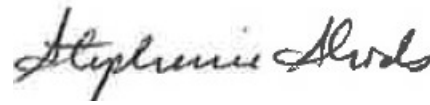
If there are any questions regarding this report, please contact Stephanie Hinds at (505) 302-1127 or Monica Peppin at (575) 909-3418.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Reviewed by:



Monica Peppin, A.S.
Project Manager



Stephanie Hinds, P.E.
Senior Engineer

REFERENCES:

New Mexico Office of the State Engineer (NMOSE) online water well database
https://gis.ose.state.nm.us/gisapps/ose_pod_locations/

USGS National Water Information System: Web interface online water well database
https://nwis.waterdata.usgs.gov/nwis/gwlevels?site_no=321205103544701&agency_cd=USGS&format=html

U.S. Fish and Wildlife Service: National Wetlands Inventory
[Wetlands Mapper | U.S. Fish & Wildlife Service](#)

New Mexico State Land Office: Land Status
[NMSLO Land Status](#)

United States Department of Agriculture: Natural Resources Conservation Service: Web Soil Survey
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

USDA, USGS The National Map: Orthoimagry: FEMA's National Flood Hazard Layer (NFHL) Viewer
<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>

NMBGMR: Interactive Resources Map
[NMBGMR Interactive Resources Map](#)

ATTACHMENTS:

Attachment 1: Site Assessment Report and Photolog
Attachment 2: Closure Criteria Research
Attachment 3: Correspondence

ATTACHMENT 1: SITE ASSESSMENT REPORT

Site Assessment and Photolog



Client: Devon Energy Corporation

API Number: 30-025-41913

Site: Horned Viper 20 Federal Com
#001H

Incident ID: nAPP2432327226

Project Manager: Monica Peppin

Project Owner: Jim Raley

Field Notes

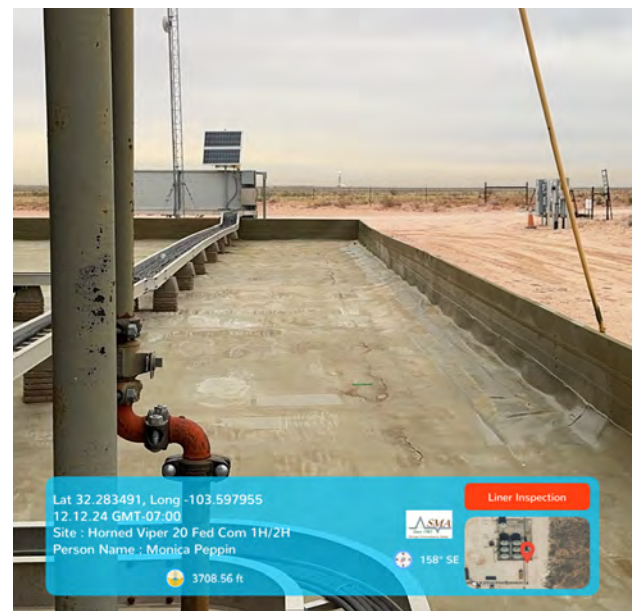
December 12, 2024

- Arrive on site, complete safety paperwork.
- Conduct visual inspection of secondary containment by taking pictures from different positions around the containment and between tanks.
- Inspected for any visible perforations, cuts, rips, tears, or substantial weathering that could lead to the potential breach through the liner.
- Inspection concluded that there are no signs of permeation through the liner and the barrier between the secondary containment and ground surface is isolated to withhold fluids.

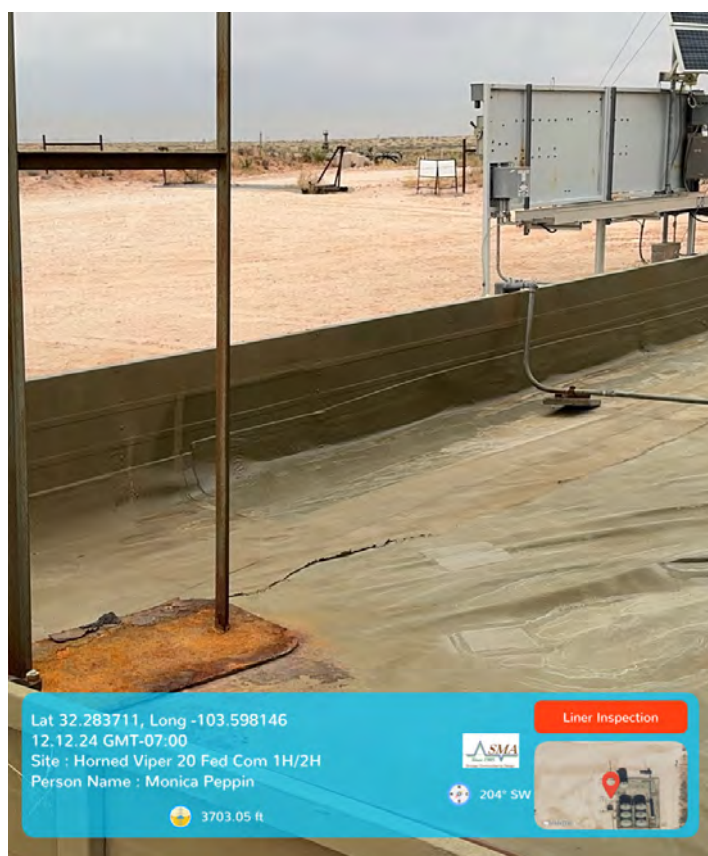
Photographs



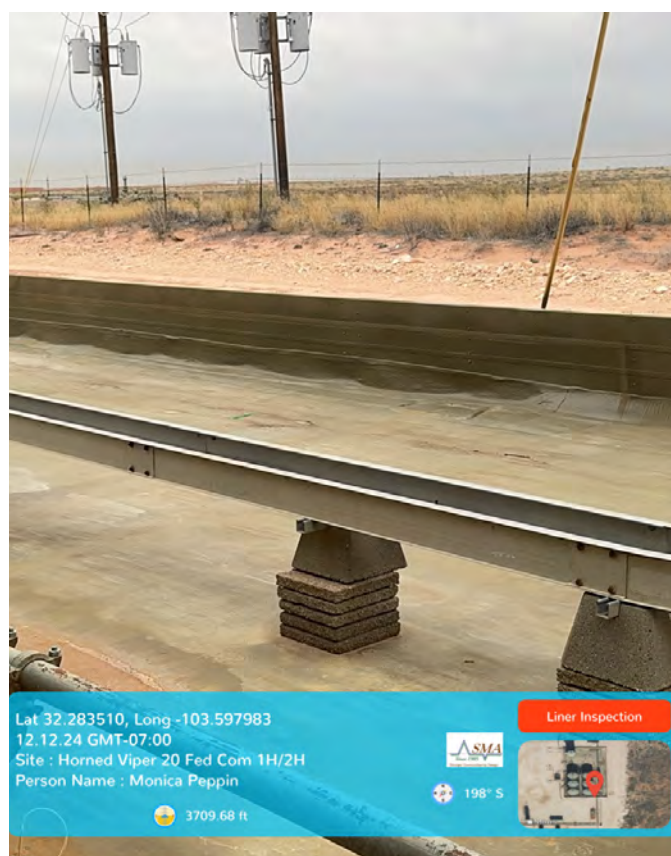
Photograph #1: Lease sign with site information and geographic data.



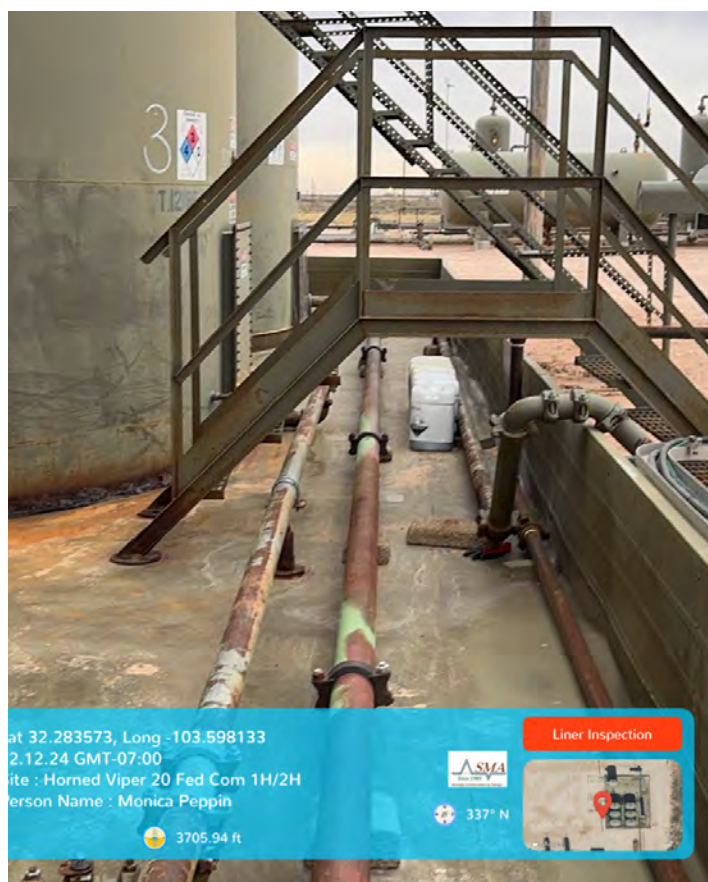
Photograph #2: East side of containment looking north.



Photograph #3: North wall area of containment.



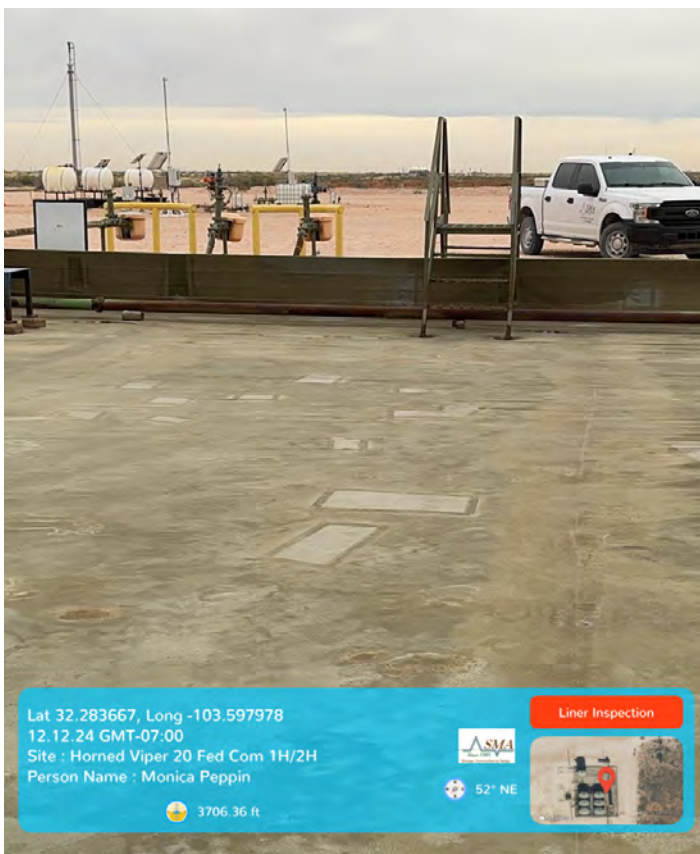
Photograph #4: East wall area of the northern section of containment.



Photograph #5: Facing south showing west side of containment.



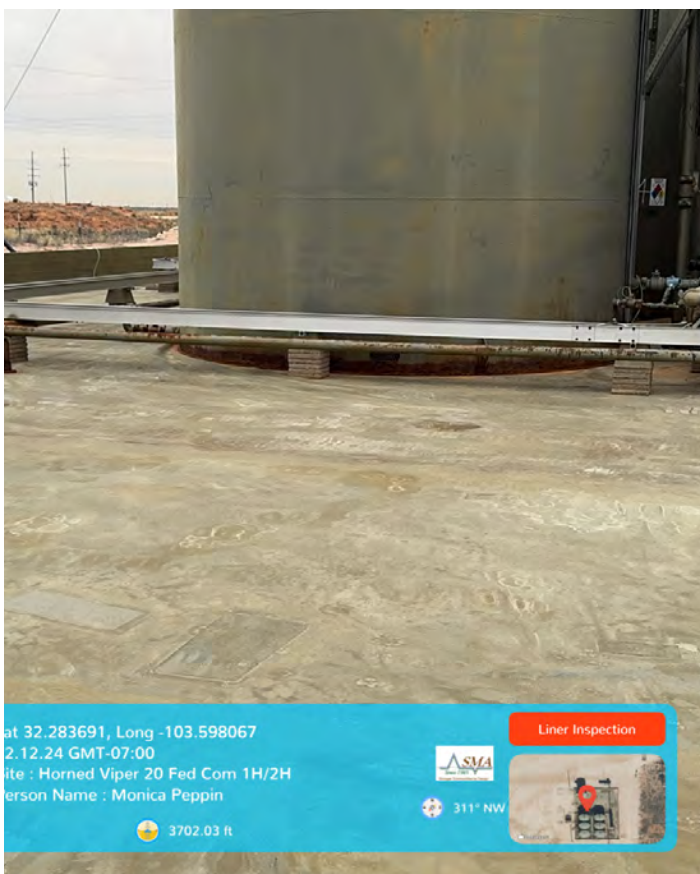
Photograph #6: Looking south to show southwest corner.



Photograph #7: Facing west from northeast corner.



Photograph #8: Facing north looking at west side of containment.



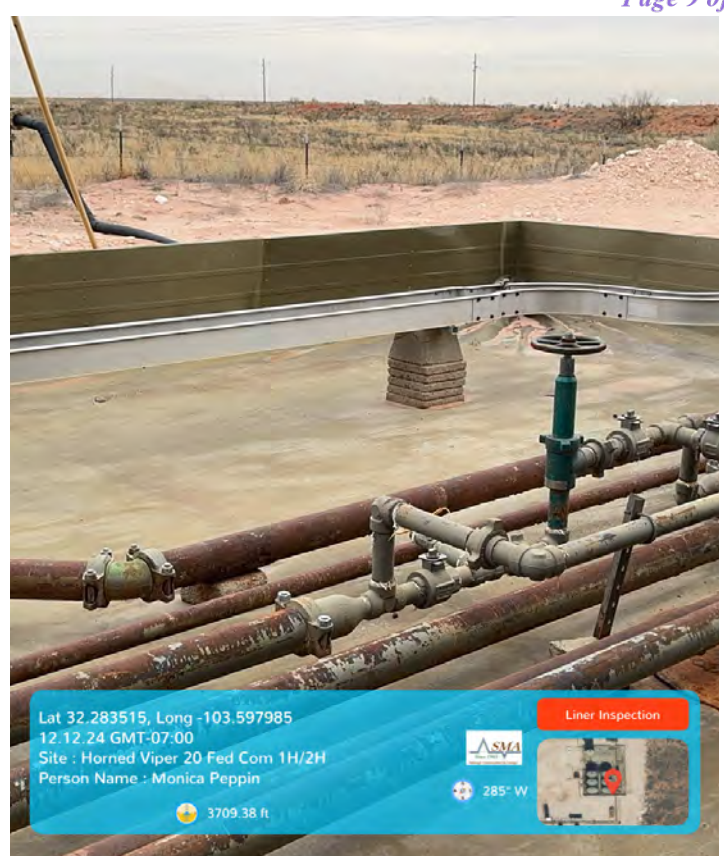
Photograph #9: North area of containment looking south.



Photograph #10: Facing north showing east side of containment.



Photograph #11: Northwest area of containment.



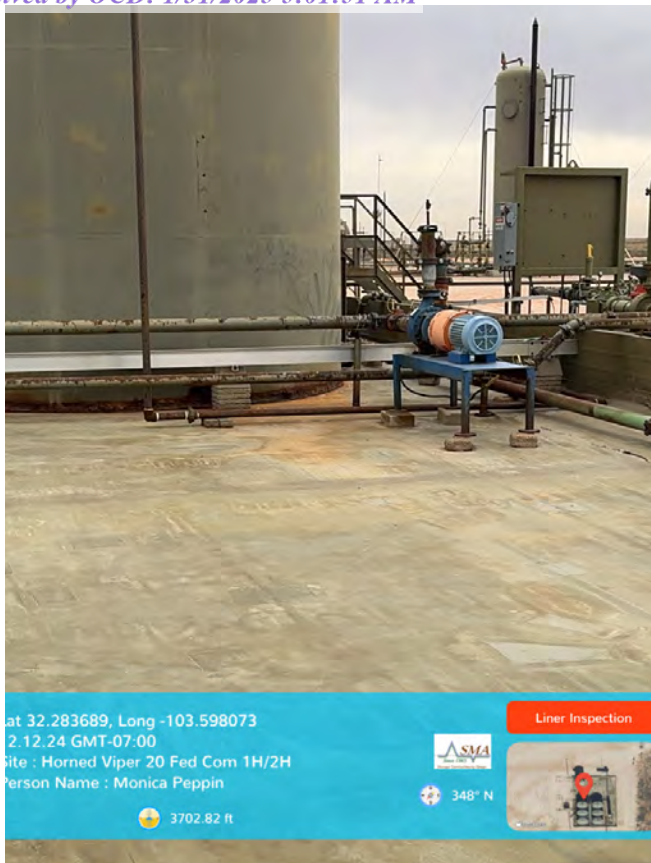
Photograph #12: Southeast corner of containment.



Photograph #13: Facing north for southeast area.



Photograph #14: Facing east showing north side of containment.



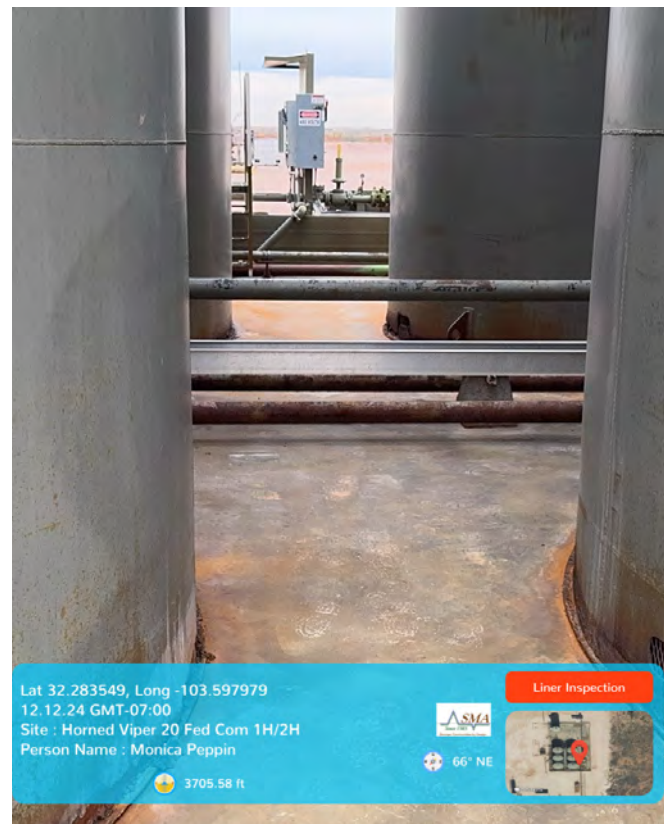
Photograph #15: Looking south showing open area of containment on north side.



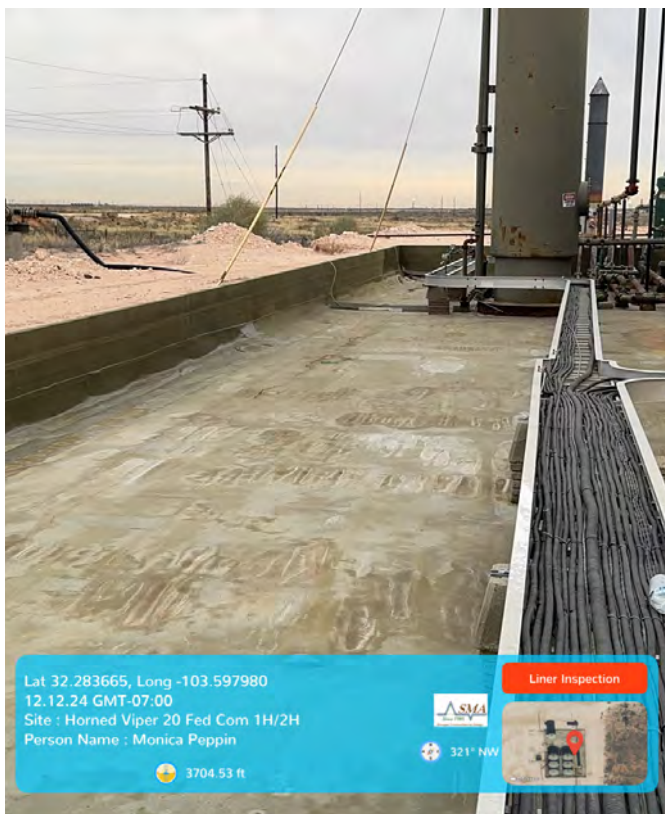
Photograph #16: In between tanks looking north.



Photograph #17: Northeast corner of containment.



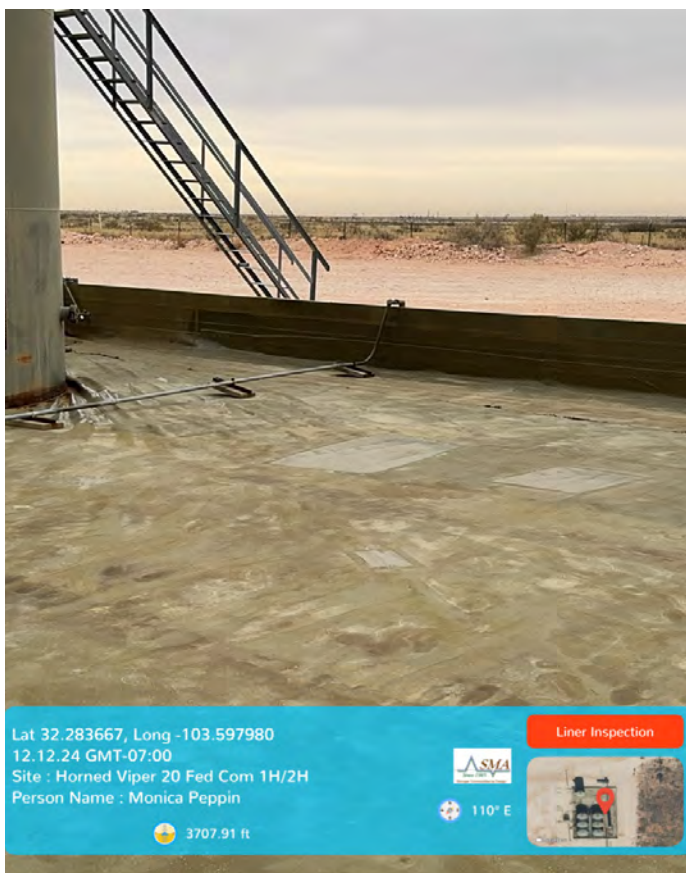
Photograph #18: In between tanks.



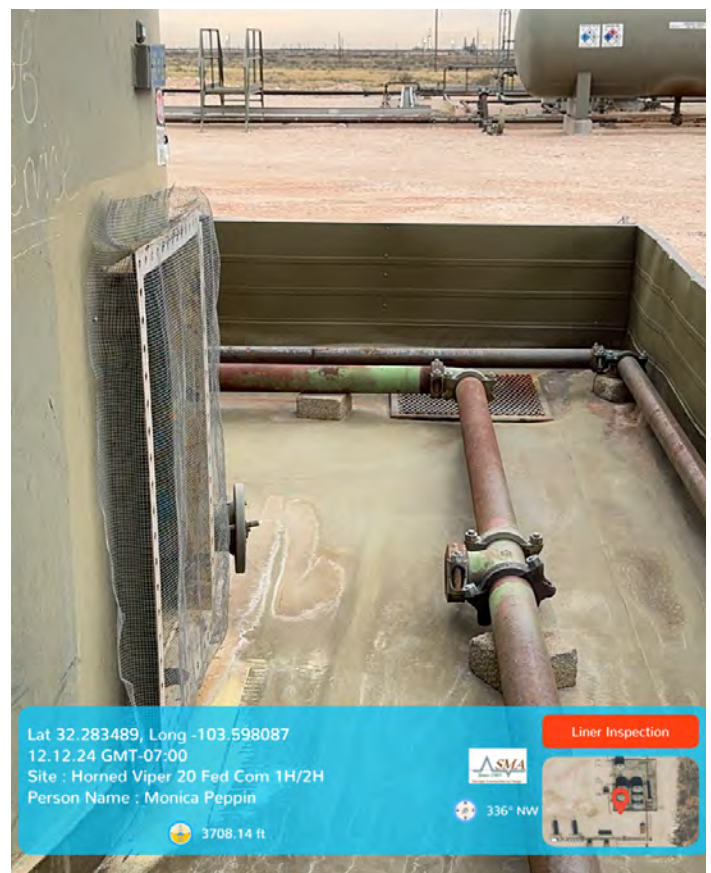
Photograph #19: East area of containment



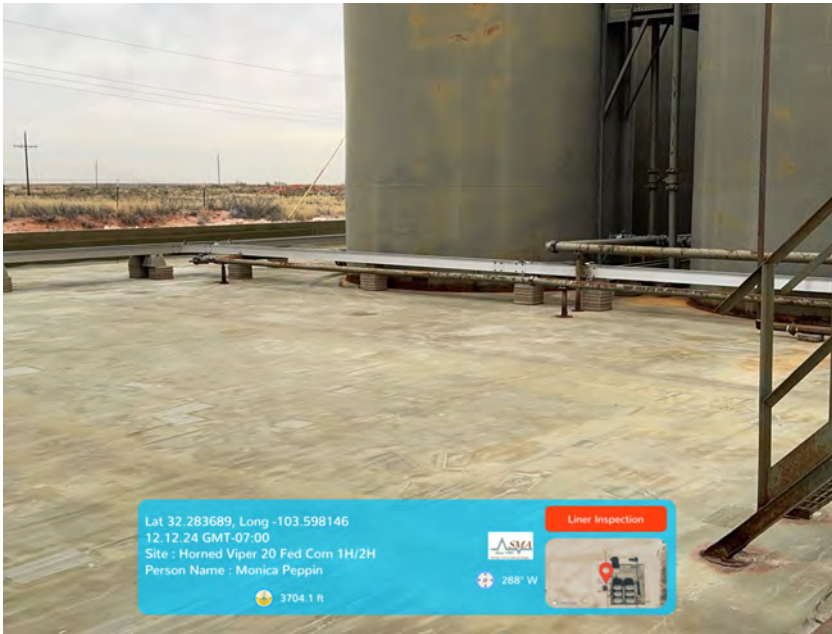
Photograph #20: Liner on north side of tanks



Photograph #21: Looking west showing open area of liner.



Photograph #22: Looking south showing liner on east side.



Photograph #23: North end of containment looking southeast

Photograph #24:
Facing East showing
liner between tanks.



Technician: Monica Peppin

Date: 12/12/2024

Signature: _____

ATTACHMENT 2: CLOSURE CRITERIA DETERMINATION RESEARCH

Horned Viper 20 Federal Com #001H

Containment: 6,995 sq ft

POR Coordinates: 32.283600, -103.598106

Legend



Horned Viper 20 Federal Com #001H



Containment



Horned Viper 20 Federal Com #001H



Horned Viper 20 Federal Com #001H - OSE POD Location Map



1/30/2025, 10:56:15 AM

- Override 1

GIS WATERS PODs

● Pending

●

□ OSE District Boundary
- Water Right Regulations

□ Closure Area

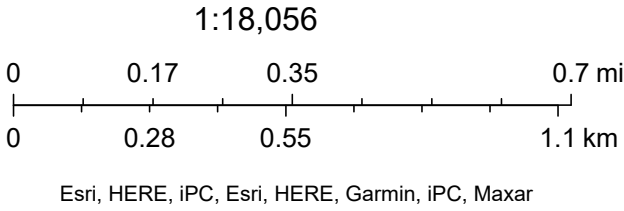
□ Artesian Planning Area

New Mexico State Trust Lands

□ Subsurface Estate

□ Both Estates

OSE Pod C-02277
Depth to Groundwater 400 feet
Distance: 0.43 miles/2,286 feet





NEW MEXICO OFFICE OF THE STATE ENGINEER

CHANGE OF OWNERSHIP OF WATER RIGHT (NON-72-12-1) FOR (check one):



Important: Acceptance of the form for filing by the State Engineer does not constitute verification of the right conveyed.

<input type="checkbox"/> Individual	<input type="checkbox"/> Corporation
<input type="checkbox"/> Trustee	<input type="checkbox"/> Partnership
<input type="checkbox"/> Estate	<input checked="" type="checkbox"/> Limited Liability Co.

1. OWNER OF RECORD (Seller)

Name: Brininstool XL Ranch, LLC	Name:	
Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work): 575-393-0505 (atty's office)	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):	
a. Owner of Record File No: C-2277	b. Sub-file No.:	c. Cause No.:

Well Tag ID No. (if applicable): _____

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

Name: HUGHES PROPERTIES, LLC	Name: BRINSTOOL XL RANCH, LLC (Mortgagee)
Contact or Agent: check here if Agent <input type="checkbox"/> TREY HUGHES	Contact or Agent: check here if Agent <input type="checkbox"/> CHRISTINE BRINSTOOL
Mailing Address: PO BOX 5097	Mailing Address: 1523 BUTLER RD
City: CARLSBAD	City: SAN ANGELO
State: NM Zip Code: 88221	State: TX Zip Code: 76904
Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work): 575-236-6012	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional):	E-mail (optional):

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

3. PURPOSE OF USE & AMOUNT CONVEYED

Check all that apply: <input type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Livestock <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Irrigation <input type="checkbox"/> Other Uses (specify): _____ <input type="checkbox"/> Municipal	Amount of Water (acre-feet per annum): If more details are needed, type "See Comments" in "Other" field below, and explain in Additional Statements Section. Diversion: _____ Consumptive Use: 48.4 Other (include units): _____
Owner of record has conveyed all or part of said right (please check one) <input checked="" type="checkbox"/> All <input type="checkbox"/> Part	

FOR OSE INTERNAL USE

Change of Ownership, Form wr-02, Rev 6/30/17

File No.: C-2277	Trn. No.: 614438	Well Tag ID No. (if applicable):
Trans Desc. (optional):	Sub-Basin: AUB	Receipt No.: 2-38656

4. LIST ALL KNOWN POINT(S) OF DIVISION (POD) FOR THE WATER RIGHT CONVEYANCE

OSE POD No.	POD Coordinates: (X & Y or Lat/Long or Easting/Northing)	Section	Township	Range
C-2277	NE/4, SW/4, SE/4	20	23S	33E

Check all that apply: ☒ Well ☐ Pump ☐ Ditch Name _____ ☐ River Course _____

5. PLACE(S) OF USE (list each individually)

a. _____ Acres of Irrigated Land Described as Follows (applicable to irrigation use only):

b. Legally Described By: <input checked="" type="checkbox"/> Public Land Survey System (PLSS) <input type="checkbox"/> Hydrographic Survey Report or Map <input type="checkbox"/> Irrigation or Conservation District Map <input type="checkbox"/> Subdivision PLSS Quarters or Halves, <u>and/or</u> Name of Hydrographic Survey or District, <u>and/or</u> Name and County of Subdivision	c. PLSS Section <u>and/or</u> Map No. <u>and/or</u> Lot No.	d. PLSS Township <u>and/or</u> Tract No. (Please list each tract individually) <u>and/or</u> Block No.	e. PLSS Range	f. Acres	g. Priority
NE/4, SW/4, SE/4	20	23S	33E		

h. Other description relating place of use to common landmarks, streets, or other:

i. Place of use is on land owned by:

j. Are there other sources of water for these lands? No ☐ Yes ☐ If yes, describe by OSE file number:

Note: If on Federal or State Land, please provide copy of lease

6. ADDITIONAL STATEMENTS OR EXPLANATIONS

--

FOR OSE INTERNAL USE

Change of Ownership, Form wr-02, Rev 6/30/17

File No.: C-2277	Trn. No.: 614438	Well Tag ID No. (if applicable):
Trans Desc. (optional):	Sub-Basin: 10B	Receipt No.:

7. CONSENT TO LAWFUL CHANGE IN PLACE AND/OR PURPOSE OF USE

(to be completed only if it is an irrigation water right and has been conveyed separate from the land to which it was appurtenant.)

(I, We) the above owner(s) of record, hereby consent to a lawful change in the place and/or purpose of use of the above-described water right:

Signature _____

Signature _____

ACKNOWLEDGEMENT FOR INDIVIDUAL

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

Print Name(s)

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

Signature _____

Signature _____

State of _____)

ss.

County of _____)

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

Notary Public: _____

My commission expires: _____

ACKNOWLEDGEMENT FOR CORPORATIONI, We (name of owner(s)), Hughes Properties, LLC

Print Name(s)

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

Officer Signature _____

Officer Signature _____

State of _____)

New Mexico

ss.

County of _____)

LeaThis instrument was acknowledged before me this 21 day of September A.D., 20 17, by the following on behalf of said corporation.Name of Officer: Trey HughesTitle of Officer: ManagerName of Corporation Acknowledging: Hughes Properties, LLCState of Corporation: New MexicoOFFICIAL SEAL
BROOKLYNN D. CHESTER
NOTARY PUBLIC-STATE OF NEW MEXICOMy commission expires: 4/4/20Notary Public: Brooklyn D ChesterMy commission expires: April 4, 2020

2017 SEP 25 AM 4:07

STATE OF NEW MEXICO
NOTARY PUBLIC

FOR USE INTERNAL USE

Change of Ownership, Form wr-02, Rev 09/08/17

File No.: <u>C-2277</u>	Tm. No.: <u>614438</u>	Well Tag ID No. (if applicable):
Trans Desc. (optional):	Sub-Basin: <u>CVB</u>	Receipt No.:

Page 3 of 3

LEA COUNTY, NM
KEITH MANES, COUNTY CLERK
000013391
Book 2122 Page 529
1 of 2
09/22/2017 02:32 PM
BY CHERI LONG

SPECIAL WARRANTY DEED

For consideration paid, the receipt and adequacy of which is hereby acknowledged, Brininstool XL Ranch, LLC, a New Mexico limited liability company, hereby grants to **HUGHES PROPERTIES, LLC**, a New Mexico limited liability company, whose address is PO Box 5097, Carlsbad, New Mexico 88221, the following described real estate in Lea County, New Mexico:

SURFACE ONLY TO:

Township 23 South, Range 32 East, N.M.P.M.

Section 21: NE4NE4, SE4NE4

Township 23 South, Range 33 East, N.M.P.M.

Section 19: All
Section 20: All
Section 21: All
Section 24: All
Section 25: All
Section 26: All
Section 28: All
Section 29: E/2
Section 30: W/2


Township 25 South, Range 33 East, N.M.P.M.

- Section 20: S/2NE/4, SE/4
- Section 21: S2NW4, SW4
- Section 29: NE/4

INCLUDING all improvements thereon and all water rights appurtenant thereto.

with special warranty covenants. Subject to reservations, easements and restrictions of record.

BRININSTOOL XL RANCH, LLC

BY: 
CHRISTINE BRININSTOOL, Manager

{00379370}

LEA COUNTY, NM
KEITH MANES, COUNTY CLERK
080013391
Book 2122 Page 529
2 of 2
09/22/2017 02:32 PM
BY CHERI LONG

STATE OF NEW MEXICO

SS.

COUNTY OF LEA

The foregoing instrument was acknowledged before me on September 21, 2017, by CHRISTINE BRINSTOOL, Manager, on behalf of Brinstool XL Ranch, LLC, a New Mexico limited liability company.



OFFICIAL SEAL
JANICE JONES
NOTARY PUBLIC STATE OF NEW MEXICO

My commission expires 2-18-2018

Janice Jones
JANICE JONES, NOTARY PUBLIC

After recording, return to:
Hughes Properties, LLC
Attn: Trey Hughes
PO Box 5097
Carlsbad, New Mexico 88221

{00379370}

Tom Blaine, P.E.
State Engineer



Well Office
10 WEST SECOND STREET
ROSWELL, NM 88201

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

Trn Nbr: 614438
File Nbr: C 02277

Oct. 03, 2017

MSTAPLETON LLC
910 W PERCE ST #138
CARLSBAD, NM 88220

RE: TREY HUGHES
HUGHES PROPERTIES LLC
PO BOX 5097
CARLSBAD, NM 88220-5097

BRININSTOOL XL RANCH LLC
CHRISTINE BRININSTOOL, MORTGAGEE
1523 BUTLER RD
SAN ANGELO, TX 76904

Greetings:

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

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

The Conditions of Approval of your permit require that your well(s) be metered and that meter readings be submitted to this office in writing.

A form(s) have been enclosed for your convenience for submittal of meter readings. Please make copies of this form(s) for your use. If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Y Mendiola".

Yolanda Mendiola
(575) 622-6521

Enclosure

mtrown_req

STATE ENGINEER OFFICE
METER READING FORM



Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

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

File Nbr: C 02277
Well File Nbr: C 02277

TREY HUGHES
HUGHES PROPERTIES LLC
PO BOX 5097
CARLSBAD, NM 88220-5097

1. WATER METER INFORMATION:

Well File Nbr: C 02277
Serial Number: 1527870
Number of Dials: 6
Unit of Measure: GALS

Meter Rec. Nbr: 516
Meter Make: MASTER METER
Multiplier: 10.0000

2. METER READING INFORMATION:

Meter Reading: _____

Meter Reading Date: _____

3. COMMENTS:

Submitted by: _____

Instructions:

Meter readings shall be submitted to the District at the above address on or before the 10th of January, April, July, and October of each year for the 3 preceeding calendar months.

Section 1. If meter has been replaced, complete all items in Section 1 for the new meter.

Section 2. Please enter meter reading and the date of the reading;

Section 3. Under comments, give any pertinent information concerning repair of meter and dates out of service, meter change out, etc.

** Please make copies of this form for submitting your meter readings.

mtrread

Hughes Properties, LLC
PO Box 5097
Carlsbad, NM 88221
Trey 575-361-3217 or Kali 575-308-8981

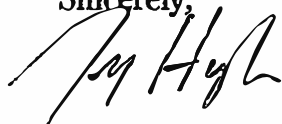
September 22, 2017

New Mexico Office of the State Engineer
1900 West Second St.
Roswell, NM 88201

To whom it may concern;

I, Trey Hughes give M.Stapleton, LLC my permission to act as my agent on the transactions for water rights on the Hughes Properties, LLC.

Sincerely,




Trey Hughes
575-361-3217

2017 SEP 25 AM 4:12

NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSSELL, NM 88201

Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE
quarters are smallest to largest
NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
C 02277	NE	SW	SE	20	23S	33E	632663.0	3572970.0 *		

* UTM location was derived from PLSS - see Help

Driller License:		Driller Company:	
Driller Name:		ABBOTT BROTHERS	
Drill Start Date:		Drill Finish Date:	1974-12-31
		Plug Date:	
Log File Date:		PCW Rcv Date:	
		Source:	
		Shallow	
Pump Type:		Pipe Discharge Size:	
		Estimated Yield:	
		30	
Casing Size:	8.63	Depth Well:	550
		Depth Water:	400

Meter Information

Meter Number:	516	Meter Make:	MASTER METER
Meter Serial Number:	1527870	Meter Multiplier:	10.0000
Number of Dials:	6	Meter Type:	Diversion
Unit of Measure:	Gallons	Reading Frequency:	Quarterly

Meter Readings (in Acre-Feet)

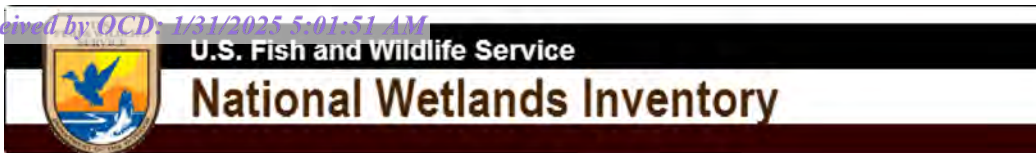
Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
1999-02-27	1999	9375.000	A	ms		0.000	
1999-04-15	1999	9375.000	A	ms		0.000	
1999-07-18	1999	9375.000	A	ms		0.000	
1999-11-28	1999	32883.000	A	ms		0.721	
2000-04-06	2000	68700.000	A	mb		1.099	
2000-08-16	2000	68722.000	A	mb		0.001	
2000-09-15	2000	68723.000	A	RPT		0.000	
2001-01-19	2000	68723.000	A	RPT		0.000	

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
2001-04-27	2001	68723.000	A	RPT		0.000	
2001-07-16	2001	68723.000	A	ms		0.000	
2002-01-12	2002	68723.000	A	tg		0.000	
2002-04-13	2002	68723.000	A	RPT		0.000	
2002-07-12	2002	68723.000	A	rm		0.000	
2003-01-01	2002	68723.000	A	RPT		0.000	
2003-04-23	2003	882399.000	A	RPT		24.971	
2003-07-11	2003	882711.000	A	RPT		0.010	
2003-10-01	2003	888716.000	A	ab		0.184	
2004-01-08	2003	896550.000	A	ab		0.240	
2004-04-07	2004	896565.000	A	RPT		0.000	
2004-07-15	2004	899394.000	A	RPT		0.087	
2004-10-12	2004	899404.000	A	RPT		0.000	
2005-01-26	2004	899404.000	A	RPT		0.000	
2005-04-15	2005	899404.000	A	RPT		0.000	
2005-08-03	2005	899406.000	A	RPT		0.000	
2005-10-31	2005	899406.000	A	RPT		0.000	
2006-01-31	2005	899406.000	A	RPT		0.000	
2006-04-20	2006	899406.000	A	RPT		0.000	
2006-07-19	2006	909832.000	A	tw		0.320	
2006-11-27	2006	909832.000	A	RPT		0.000	
2007-04-16	2007	909832.000	A	RPT		0.000	
2007-07-13	2007	909832.000	A	RPT		0.000	
2007-11-03	2007	909832.000	A	RPT		0.000	
2008-04-15	2008	909832.000	A	RPT		0.000	
2008-07-11	2008	909832.000	A	RPT		0.000	
2009-01-08	2008	909832.000	A	RPT		0.000	
2009-05-07	2009	909832.000	A	RPT		0.000	

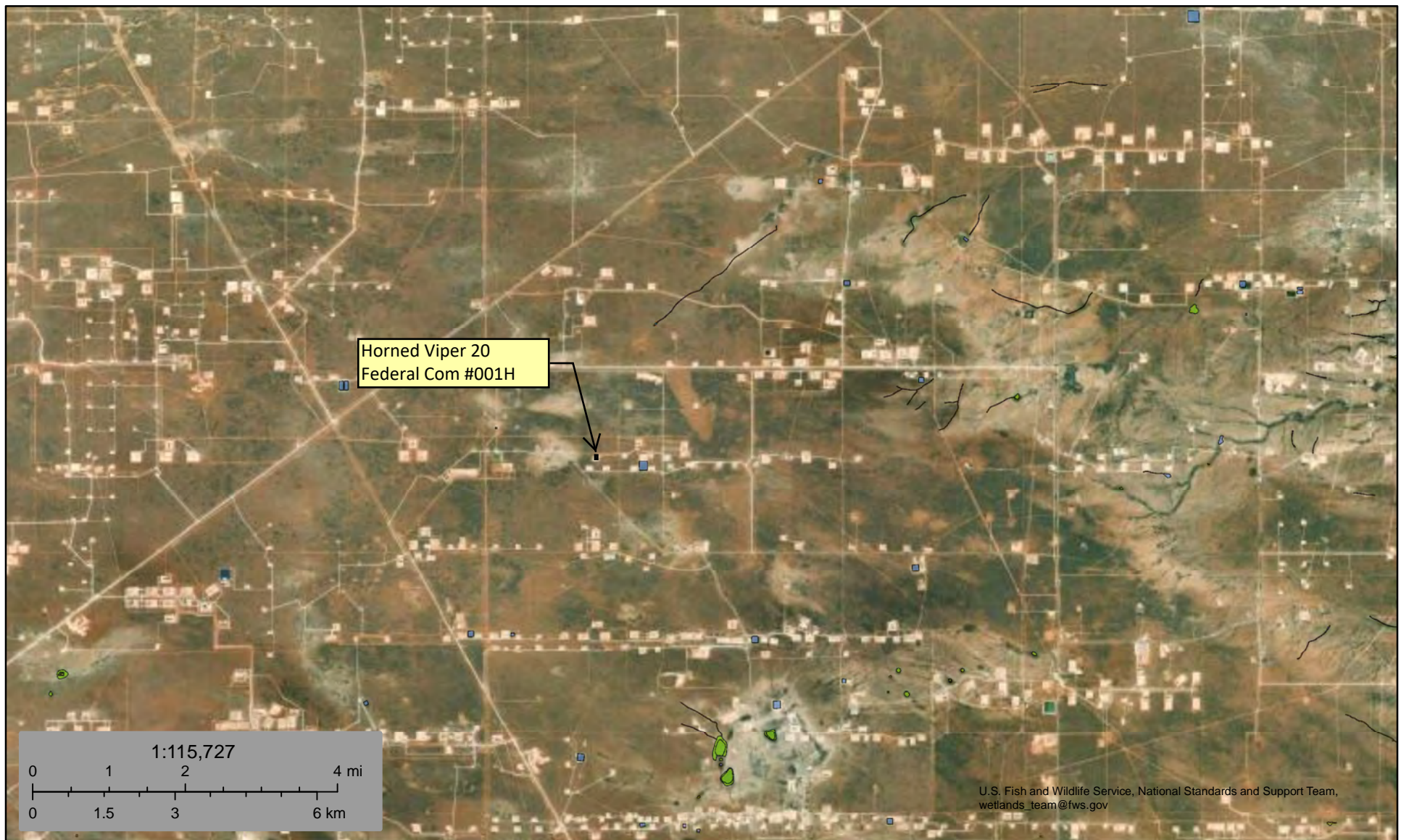
Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
2009-07-06	2009	913539.000	A	RPT		0.114	
2009-11-12	2009	945793.000	A	tw		0.990	
2010-05-13	2010	951283.000	A	RPT		0.168	
2010-08-23	2010	951283.000	A	RPT		0.000	
2010-11-09	2010	951283.000	A	RPT		0.000	
2011-02-13	2011	951283.000	A	RPT		0.000	
2011-07-12	2011	86397.000	R	RPT	Meter Rollover	4.146	
2012-01-10	2012	254337.000	A	RPT		5.154	
2012-04-15	2012	328978.000	A	RPT		2.291	
2013-03-20	2012	544463.000	A	RPT		6.613	
2013-07-18	2013	557631.000	A	RPT		0.404	
2019-07-22	2019	803867.000	A	RPT		7.557	
2020-04-01	2020	150762.000	R	RPT	Meter Rollover	10.646	

YTD Meter Amounts:

Year	Amount	Year	Amount
1999	0.721	2011	4.146
2000	1.100	2012	14.058
2001	0.000	2013	0.404
2002	0.000	2019	7.557
2003	25.405	2020	10.646
2004	0.087		
2005	0.000		
2006	0.320		
2007	0.000		
2008	0.000		
2009	1.104		
2010	0.168		



National Wetlands Inventory Map: Surface Waters and Wetlands



January 30, 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.

Note: See following page for distances from site to each feature.

Legend

-  Distance to Emergent Wetland
-  Distance to Playa Lake
-  Distance to Residence
-  Distance to Significant Watercourse
-  Horned Viper 20 Federal Com #001H

Horned Viper 20 Federal Com #001H




Nearest Significant Watercourse:
Riverine
Distance: 1.58 miles/8,341 feet
Nearest Playa Lake: Freshwater pond
Distance: 3.65 miles/19,293 feet
Nearest Wetlands: Freshwater Emergent
Wetland
Distance: 3.37 miles/17,786 feet
Nearest Residence: 1.33 miles/7,041 feet




Horned Viper 20 Federal Com #001H

Nearest Municipal Boundary: Jal, NM
Distance: 25.62 miles/135,271 feet

Legend

-  Distance to Municipal Boundary
-  Horned Viper 20 Federal Com #001H
-  Jal Municipal Boundary

 Horned Viper 20 Federal Com #001H

Google Earth

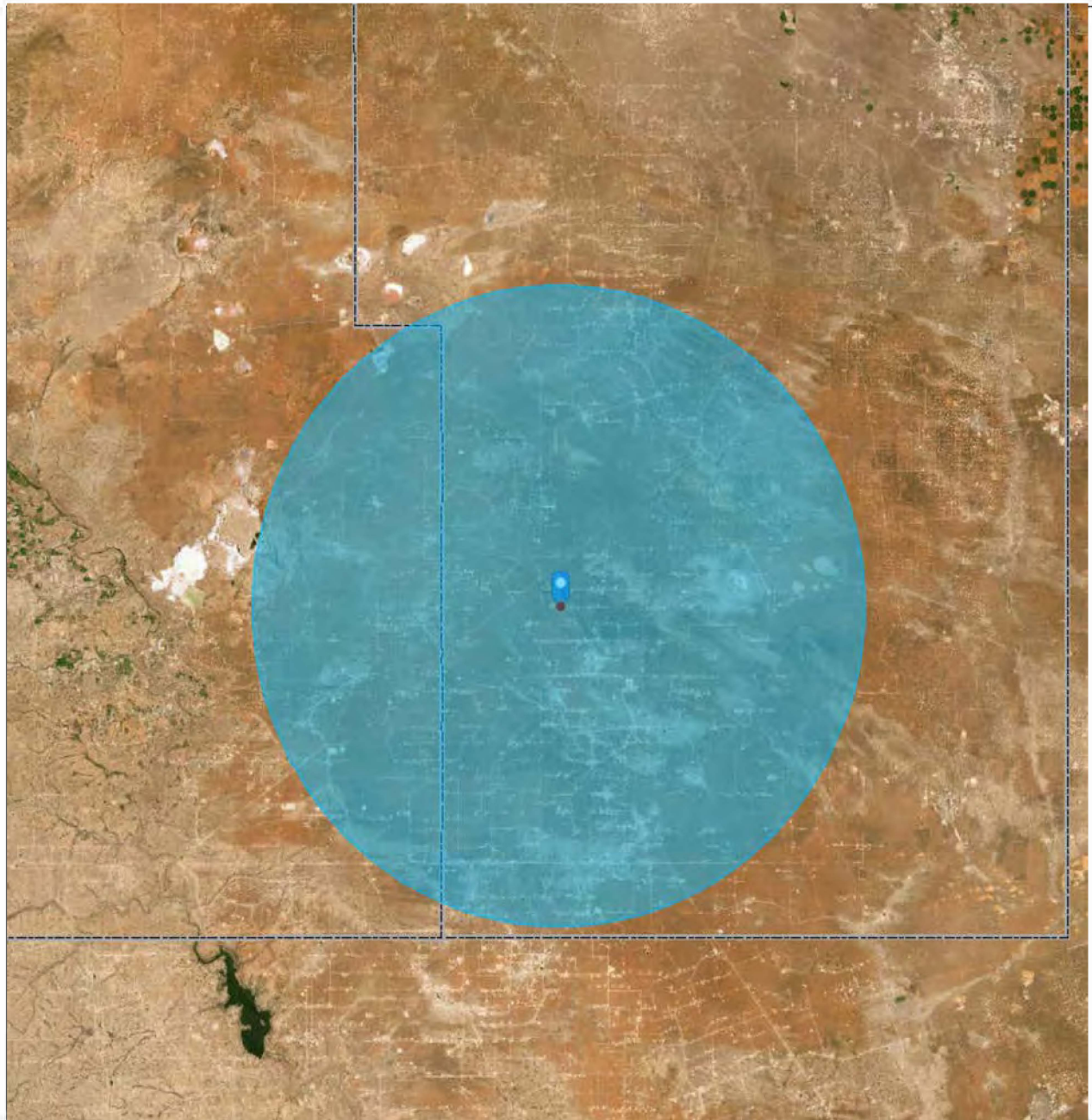
Released to Imaging: 2/5/2025 11:36:15 AM

Image © 2025 Airbus

10 mi



Horned Viper 20 Federal Com #001H - Mines/Unstable Area Map



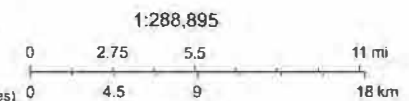
1/26/2025, 12:03:35 PM

Countries
REE Districts

Horned Viper 20 Federal Com #001H - Subsurface Mines/Non-Karst Unstable Areas 15 Mile Radius - No features within boundary

- Fe skarn, carbonate-hosted Pb-Zn
- REE-Th-U veins, fluorite veins
- Vein and replacement deposits in Proterozoic rocks, tin veins, volcanic-epithermal vein
- carbonatite
- beach-placer sandstone
- disseminated Y-Zr deposits in alkaline rocks, REE-Th-U veins

- episyenites (metasomatites)
- granite, syenite
- pegmatite
- REE Mine Events
 - beach-placer sandstone
 - carbonatite
 - episyenites (metasomatites)
 - placer REE



New Mexico Bureau of Geology and Mineral Resources, New Mexico Bureau of Geology & Mineral Resources, Earthstar Geographics, NMBGMR



Horned Viper 20 Federal Com #001H Karst Potential/Distance

0 0.75 1.5 3 mi



New Mexico State Land Office

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

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

Map Created: 1/25/2025

● User drawn points

Karst_Potential_NM

Potential
High

Medium

Low

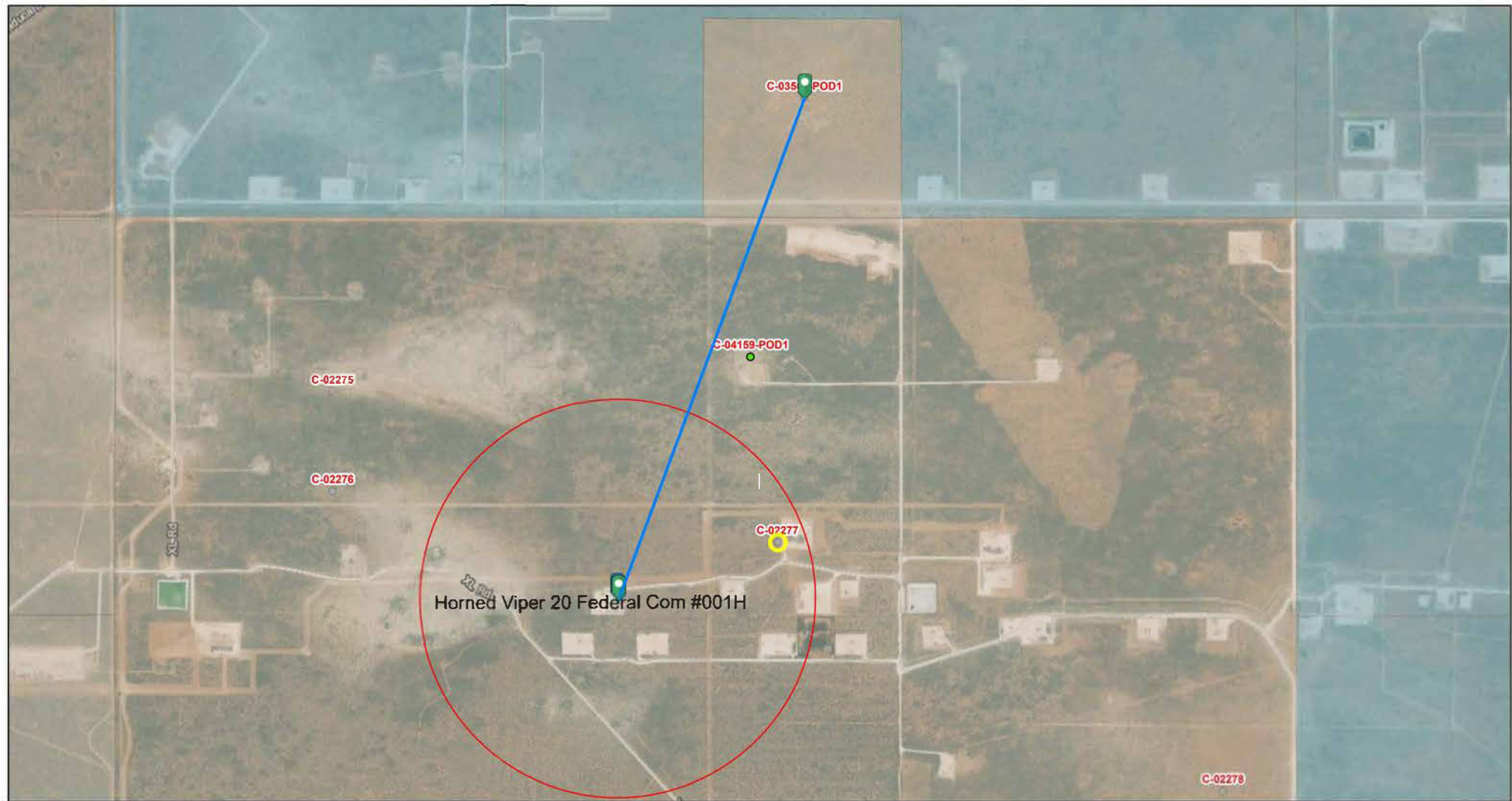
Critical_Karst_Zone_NM

Karst Potential: Low

Distance to Medium Karst Feature: 12.6 miles (66,721 feet)



Horned Viper 20 Federal Com #001H 0.5-mile Radius/Nearest Stock Watering Well

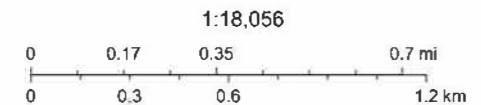


1/27/2025, 6:07:01 PM

- | | | |
|-------------------|---------------------------|--------------------------------|
| — Override 1 | □ OSE District Boundary | ■ New Mexico State Trust Lands |
| ● GIS WATERS PODs | ■ Water Right Regulations | ■ Subsurface Estate |
| ● Pending | ■ Closure Area | ■ Both Estates |
| ● | □ Artesian Planning Area | |

Distance to Stock Watering Pod C-03562-POD1
1.34 miles/7,101 feet

OSE Pod C-02277
Depth to Groundwater 400 feet
Distance: 0.43 miles/2,286 feet



Esri, HERE, IPC, Esri, HERE, Garmin, IPC, Maxar

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

Water Right Summary



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

WR File Number: C 03562		Subbasin: C	Cross Reference:
Primary Purpose: STK 72-12-1 LIVESTOCK WATERING			
Primary Status: PMT Permit			
Total Acres:		Subfile:	Header:
Total Diversion: 3.000		Cause/Case:	
Owner:	LIMESTONE BASIN PROPERTIES	Owner Class:	Owne r
Contact: JOHN LANGDON			

Documents on File

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres
get images 642075		COWNF	2019-03-21	CHG	PRC	C 03562	T	
get images 507817		COWNF	2012-07-20	PMT	APR	C 03562	T	

Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location
C 03562 POD1			SW	NE	SE	17	23S	33E	632747.1	3574765.4		

* UTM location was derived from PLSS - see Help

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

National Flood Hazard Layer FIRMette



103°36'12"W 32°17'16"N



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

1:6,000

103°35'34"W 32°16'46"N

Released to Imaging: 2/5/2025 10:06:15 AM

Basemap Imagery Source: USGS National Map 2023

Legend

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

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



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/26/2025 at 5:33 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Soil Map—Lea County, New Mexico



Soil Map may not be valid at this scale.



Map Scale: 1:1,030 if printed on A landscape (11" x 8.5") sheet.



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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
PU	Pyote and Maljamar fine sands	4.6	100.0%
Totals for Area of Interest		4.6	100.0%



Natural Resources
Conservation Service


Web Soil Survey
National Cooperative Soil Survey

1/26/2025
Page 1 of 3

Soil Map—Lea County, 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: Lea County, New Mexico

Survey Area Data: Version 21, Sep 3, 2024

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

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

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

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

Lea County, New Mexico

PU—Pyote and Maljamar fine sands

Map Unit Setting

National map unit symbol: dmqq

Elevation: 3,000 to 3,900 feet

Mean annual precipitation: 10 to 12 inches

Mean annual air temperature: 60 to 62 degrees F

Frost-free period: 190 to 205 days

Farmland classification: Not prime farmland

Map Unit Composition

Pyote and similar soils: 46 percent

Maljamar and similar soils: 44 percent

Minor components: 10 percent

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

Description of Pyote

Setting

Landform: Plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 30 inches: fine sand

Bt - 30 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): High
(2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Gypsum, maximum content: 1 percent

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

Sodium adsorption ratio, maximum: 2.0

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

Interpretive groups

Land capability classification (irrigated): 6e

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

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

Description of Maljamar

Setting

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

Typical profile

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

Properties and qualities

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

Interpretive groups

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

Minor Components

Kermit

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

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

Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 21, Sep 3, 2024





Ecological site R070BD003NM Loamy Sand

Accessed: 11/14/2024

General information

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

Figure 1. Mapped extent

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

Associated sites

R070BD004NM	Sandy Sandy
R070BD005NM	Deep Sand Deep Sand

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

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

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

Table 2. Representative physiographic features

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

Climatic features

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

Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes.

The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

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

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

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

Table 3. Representative climatic features

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

Influencing water features

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

Soil features

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

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

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

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

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

Characteristic soils are:

Maljamar

Berino

Parjarito

Palomas

Wink

Pyote

Table 4. Representative soil features

Surface texture	(1) Fine sand (2) Fine sandy loam (3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to moderately rapid

Soil depth	40–72 in
Surface fragment cover ≤3"	0–10%
Surface fragment cover >3"	0%
Available water capacity (0–40in)	5–7 in
Calcium carbonate equivalent (0–40in)	3–40%
Electrical conductivity (0–40in)	2–4 mmhos/cm
Sodium adsorption ratio (0–40in)	0–2
Soil reaction (1:1 water) (0–40in)	6.6–8.4
Subsurface fragment volume ≤3" (Depth not specified)	4–12%
Subsurface fragment volume >3" (Depth not specified)	0%

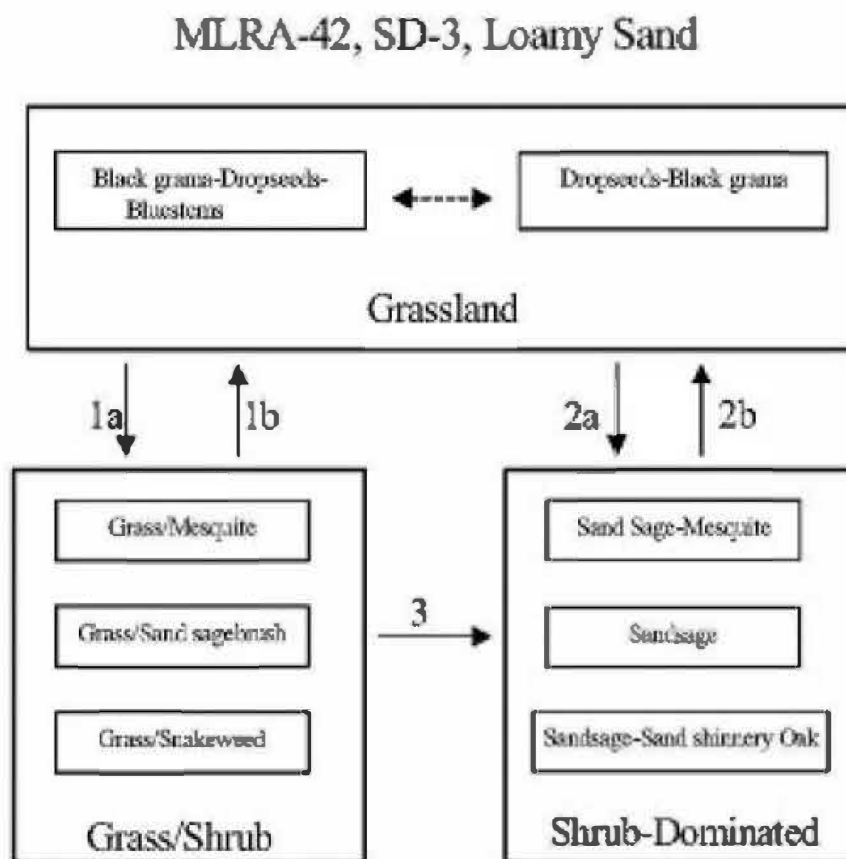
Ecological dynamics

Overview

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

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

State and transition model

Plant Communities and Transitional Pathways (diagram):

1a. Drought, over grazing, fire suppression.

1b. Brush control, prescribed grazing

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

2b. Brush control, seeding, prescribed grazing.

3. Continued loss of grass cover, erosion.

State 1**Historic Climax Plant Community****Community 1.1****Historic Climax Plant Community**

Grassland: The historic plant community is a uniformly distributed grassland dominated by black grama, dropseeds, and bluestems. Sand sage and shinnery oak are evenly dispersed throughout the grassland due to the coarse soil

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

Table 5. Annual production by plant type

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

Table 6. Ground cover

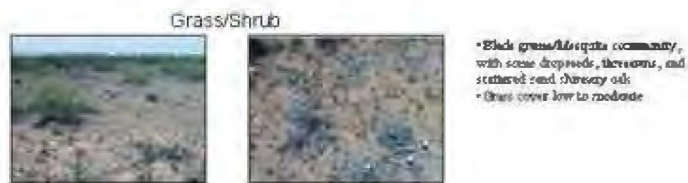
Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	28%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	50%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	22%

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

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

State 2
Grass/Shrub

Community 2.1
Grass/Shrub



Grass/Shrub State: The grass/shrub state is dominated by communities of grasses/mesquite, grasses/snakeweed, or grasses/sand sage. Decreases in black grama and bluestem species lead to an increase in bare patches and mesquite which further competes with grass species. An increase of dropseeds and threeawns occurs. Grass distribution becomes more patchy with an absence or severe decrease in black grama and bluestems. Mesquite provides nitrogen and soil organic matter to co-dominant grasses (Ansley and Jacoby 1998, Ansley et al. 1998). Mesquite mortality when exposed to fire is low due to aggressive resprouting abilities. Herbicide application combined with subsequent prescribed fire may be more effective in mesquite reduction (Britton and Wright 1971). **Diagnosis:** This state is dominated by an increased abundance of communities including grass/mesquite, grass/snakeweed, or grass/sand sage. Dropseeds and threeawns have a patchy distribution. **Transition to Grass/Shrub State (1a):** The historic plant community begins to shift toward the grass/shrub state as drivers such as drought, fire suppression, interspecific competition, and excessive grazing contribute to alterations in soil properties and herbaceous cover. Cover loss and surface soil erosion are initial indicators of transition followed by a decrease in black grama with a subsequent increase of dropseeds, threeawns, mesquite, and snakeweed. Snakeweed has been documented to outcompete black grama especially under conditions of fire suppression and drought (McDaniel et al. 1984). **Key indicators of approach to transition:** • Loss of black grama cover • Surface soil erosion • Bare patch expansion • Increased dropseed/threeawn and mesquite, snakeweed, or sand sage abundances **Transition to Historic Plant Community (1b):** Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community.

State 3 Shrub Dominated

Community 3.1 Shrub Dominated

Shrub-Dominated State: The shrub-dominated state results from a severe loss of grass cover. This state's primary species is sand sage. Shinnery oak and mesquite also occur; however, grass cover is limited to intershrub distribution. Sand sage stabilizes light sandy soils from wind erosion, which enhances protected grass/forb cover (Davis and Bonham 1979). However, shinnery oak also responds to the sandy soils with dense stands due to an

aggressive rhizome system. Shinnery oak's extensive root system promotes competitive exclusion of grasses and forbs. Sand sage, shinnery oak, and mesquite can be controlled with herbicide (Herbel et al. 1979, Pettit 1986). Transition to Shrub-Dominated (2a): Severe loss of grass species with increased erosion and fire suppression will result in a transition to a shrub-dominated state with sand sage, Shin oak, and honey mesquite directly from the grassland-dominated state. Key indicators of approach to transition: • Severe loss of grass species cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite abundance Transition to Historic Plant Community (2b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community. In addition, seeding with native grass species will augment the transition to a grassland-dominated state. Transition to Shrub-Dominated (3): If the grass/shrub site continues to lose grass cover with soil erosion, the site will transition to a shrub-dominated state with sand sage, shinnery oak, and honey mesquite. Key indicators of approach to transition: • Continual loss of dropseeds/threawns cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite/dropseed/threawn and mesquite/snakeweed abundance

Additional community tables

Table 7. Community 1.1 plant community composition

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

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

Animal community

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

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

Hydrological functions

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

Hydrologic Interpretations

Soil Series Hydrologic Group

Berino B

Kinco A

Maljamar B

Pajarito B

Palomas B

Wink B

Pyote A

Recreational uses

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

Wood products

This site has no potential for wood products.

Other products

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

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM

100 - 76 2.3 – 3.5

75 – 51 3.0 – 4.5

50 – 26 4.6 – 9.0

25 – 0 9.1 +

Inventory data references

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

Other references

Literature Cited:

Ansley, R. J.; Jacoby, P. W. 1998. Manipulation of fire intensity to achieve mesquite management goals in north Texas. In: Pruden, Teresa L.; Brennan, Leonard A., eds. Fire in ecosystem management: shifting the paradigm from suppression to prescription: Proceedings, Tall Timbers fire ecology conference; 1996 May 7-10; Boise, ID. No. 20. Tallahassee, FL: Tall Timbers Research Station: 195-204.

Ansley, R. J.; Jones, D. L.; Tunnell, T. R.; [and others]. 1998. Honey mesquite canopy responses to single winter fires: relation to herbaceous fuel, weather and fire temperature. International Journal of Wildland Fire 8(4):241-252.

Britton, Carlton M.; Wright, Henry A. 1971. Correlation of weather and fuel variables to mesquite damage by fire. Journal of Range Management 24:136-141.

Davis, Joseph H., III and Bonham, Charles D. 1979. Interference of sand sagebrush canopy with needleandthread. Journal of Range Management 32(5):384-386.

Herbel, C. H, Steger, R, Gould, W. L. 1974. Managing semidesert ranges of the Southwest Circular 456. Las Cruces, NM: New Mexico State University, Cooperative Extension Service. 48 p.

McDaniel, Kirk C.; Pieper, Rex D.; Loomis, Lyn E.; Osman, Abdelgader A. 1984. Taxonomy and ecology of perennial snakeweeds in New Mexico. Bulletin 711. Las Cruces, NM: New Mexico State University, Agricultural Experiment Station. 34 p.

Horned Viper 20 Federal Com #001H - Geological Map



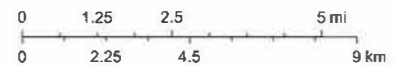
1/26/2025, 11:46:06 AM

Lithologic Units

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

Geological Background: Qep - Eolian and piedmont deposits (Holocene to middle Pleistocene) - Interlayered eolian sands and piedmont-slope deposits

1:144,448



New Mexico Bureau of Geology and Mineral Resources, New Mexico Bureau of Geology & Mineral Resources, Earthstar Geographics, NMBGMR

ArcGIS Web AppBuilder

New Mexico Bureau of Geology & Mineral Resources, Bureau of Land Management | New Mexico Bureau of Geology and Mineral Resources | New Mexico Bureau of Geology & Mineral Resources | NMBGMR |

ATTACHMENT 3: CORRESPONDENCE



Outlook

RE: [EXTERNAL] nAPP2432327226 Horned Viper 20 Federal Com #1H/2H Liner Notification

From Raley, Jim <jim.rale@dv.com>**Date** Tue 12/10/2024 7:43 AM**To** Monica Peppin <Monica.Peppin@soudermiller.com>**Cc** Stephanie Hinds <stephanie.hinds@soudermiller.com>; Reid Allan <reid.allan@soudermiller.com>; Scott McKitrick <scott.mckitrick@soudermiller.com>

Submitted to portal 12/10/2024

Jim Raley | Environmental Professional - Permian Basin

5315 Buena Vista Dr., Carlsbad, NM 88220

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

From: Monica Peppin <Monica.Peppin@soudermiller.com>**Sent:** Tuesday, December 10, 2024 5:30 AM**To:** Raley, Jim <Jim.Raley@dv.com>**Cc:** ocd.enviro@emnr.dnm.gov; Stephanie Hinds <stephanie.hinds@soudermiller.com>; Reid Allan <reid.allan@soudermiller.com>; Scott McKitrick <scott.mckitrick@soudermiller.com>**Subject:** [EXTERNAL] nAPP2432327226 Horned Viper 20 Federal Com #1H/2H Liner Notification**ALL:**

SMA anticipates conducting liner inspection activities at the following site on December 13, 2024:

Proposed Date: 12.12.24

Proposed Time Frame: 8:00 AM/12:00 PM

Site Name: Horned Viper 20 Federal Com #1H/2H

Incident Number: nAPP2432327226

API: 30-025-41913

Site Name and Incident ID:	Broadside 12 Facility 2 nAPP2432327226
Containment surface area:	6,995 square feet
Have all 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	12.12.2024

Time liner inspection will commence:	11:00 AM
Contact information:	Monica Peppin 575-909-3418
Navigation to site:	128 & Delaware Basin travel north for 1 mile, turn left onto lease rd travel west for 6.03 miles, turn left travel south for 0.93 miles, turn right travel west for 0.71 miles and arrive on location at dead end



Stronger Communities by Design

**Monica
Peppin, A.S.**

**Project
Manager**

**Direct/Mobile:
575.909.3418**

**Office:
575.689.7040**

**201 S
Halagueno St.**

**Carlsbad, NM
88220**



www.soudermiller.com

Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), FL Engineering Firm (34203), ID Engineering/Surveying Firm (C-3564), ND Engineering Firm (28545PE), OK Engineering Firm (8498), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX Surveying Firm (10162200), WY Engineering/Surveying Firm (S-1704)

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 426947

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 426947
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2432327226
Incident Name	NAPP2432327226 HORNED VIPER 20 FEDERAL COM #001H @ 30-025-41913
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-025-41913] HORNED VIPER 20 FEDERAL COM #001H

Location of Release Source	
Please answer all the questions in this group.	
Site Name	HORNED VIPER 20 FEDERAL COM #001H
Date Release Discovered	11/14/2024
Surface Owner	Private

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Flow Line - Production Produced Water Released: 24 BBL Recovered: 24 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)	Leak on piping in lined secondary containment. Notification made via email on 11/15/2024.

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 426947

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 426947
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvsn.com Date: 01/31/2025
--	---

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 3

Action 426947

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 426947
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	11/25/2025
On what date will (or did) the final sampling or liner inspection occur	12/12/2025
On what date will (or was) the remediation complete(d)	12/12/2025
What is the estimated surface area (in square feet) that will be remediated	6995
What is the estimated volume (in cubic yards) that will be remediated	0
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 4

Action 426947

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 426947
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
Is (or was) there affected material present needing to be removed	Yes
Is (or was) there a power wash of the lined containment area (to be) performed	Yes
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dv.com Date: 01/31/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<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 6

Action 426947

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 426947
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Liner Inspection Information	
Last liner inspection notification (C-141L) recorded	410208
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	12/12/2024
Was all the impacted materials removed from the liner	Yes
What was the liner inspection surface area in square feet	6995

Remediation Closure Request

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

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
What was the total surface area (in square feet) remediated	6995
What was the total volume (cubic yards) remediated	0
Summarize any additional remediation activities not included by answers (above)	Secondary Containment inspection completed. No breach through liner

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

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dmv.com Date: 01/31/2025
--	--

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 426947

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 426947
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	2/5/2025