Souder, Miller & Associates ♦ 201 S. Halagueno St.♦ Carlsbad, NM 88220
(575) 689-8801

December 12, 2024 PROJECT # 5E33088 BG# 4

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

SUBJECT: Closure Request Report for the Cotton Draw Unit #237H, Incident ID # nAPP2429757156, 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 that describes the corrective actions for a produced water incident related to oil and gas production activities at the Cotton Draw Unit #237H (Cotton Draw), Incident ID nAPP2429757156, that occurred on October 23, 2024. The spill area is located at latitude N 32.137892 and longitude W -103.668592.

Devon completed a release notification to the New Mexico Energy, Minerals, and Natural Resources Department – Oil Conservation Division (OCD) via Operators Electronic Permitting and Payment Portal on October 23, 2024, for the submission of Notice of Release (NOR), followed by the submission of the Form C-141, Release Notification on October 23, 2024. This letter provides a description of the spill assessment and includes a request for spill closure.

Table 1: Release Information and Closure Criteria

Name	Cotton Draw Unit #237H	Company	Devon Energy Production Company, LP
API Number	30-025-41996	Location	M-10-25S-32E 32.137892, -103.668592
Incident Number	nAPP2429757156	Land Status	Federal
Date of Release	October 23, 2024	Lease Number	NMLCO61936
Source of Release	Corrosion on water transfer pump		
Released Volume	5 bbls	Recovered Volume	5 bbls
NMOCD Closure Criteria	Depth to groundwater 51-100 feet below ground surface (bgs)		

2.0 Background

On October 23, 2024, a pinhole leak was discovered in the seal of the water transfer pump caused by corrosion. The total volume of released fluids was 5 barrels (bbls) of produced water. The release occurred within the secondary lined containment at Cotton Draw. Initial response activities were conducted by the operator, including source elimination, photographs of standing fluids, recovery of approximately 5 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 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), interlayed eolian sands, and piedmont-slope deposits. Soil texture is classified as Pyote loamy fine sands. Ecological settings include vegetation of mixed grasses, dominated by black grama, dropseeds with scattered shinnery oak, and sand sage. Decreases in black grama indicate a transition to either a grass/shrub or shrub dominated state. Perennial and annual forb abundance and distribution are dependent on precipitation. The grass and shrub state are composed of grasses and honey mesquite, broom snakeweed, or sand sage.

The surrounding geography and terrain are associated with plains, dunes, uplands, fan piedmonts, and interdunal areas with landforms consisting of sand dunes, hillslopes, and dunes at elevations between 2,800 and 5,000 feet above mean sea level (amsl). The annual average rainfall and precipitation ranges between 10 to 12 inches. The soil in the release location area consists of loamy fine sand to fine sandy loam, to a gravelly sandy loam, and in some areas high in lime or caliche fragments are found at the substratum layer that tends be well drained, with negligible runoff, and low available water supply. Pyote loamy fine sand is not classified as prime farmland.

4.0 Site Information and Closure Criteria

The Cotton Draw is located approximately 27.3 miles west of Bennett, New Mexico, on Federal (BLM) land at an elevation of approximately 3,446 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, as defined in 19.15.17.7.P NMAC, is the Pecos River located approximately 20.2 miles west of the site (U.S. Fish and Wildlife Service, National Wetlands Inventory, 2024). There are no continuous flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes, or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.11 NMAC.

Depth to ground water was determined using a previously reported and measured temporary borehole on site, C-4634-POD1, for a depth of 55 feet bgs. The temporary borehole was completed on June 13, 2022. Documentation in reference to site characterization and depth to groundwater is included in Attachment 2.

Based on data included in the closure criteria determination worksheet, the incident at Cotton Draw is not subject to the requirements of 19.15.29.11.A.4 NMAC. Karst potential for the area that Cotton Draw is located in is low karst based off the New Mexico State Land office Land Status Interactive Map (NMSLO). The closure criteria for the site are the constituent concentration limits associated with 51 to 100 feet depth to groundwater as stated in Table 1 of 19.15.29.12 NMAC.

5.0 Remediation Activities

Notification of the liner inspection, scheduled for November 6, 2024, was provided to Devon through email by SMA personnel on November 4, 2024. Devon provided notification to OCD and the Bureau of Land Management (BLM) through the ENMRD Electronic Permitting and Payment Portal for Operators on November 4, 2024. Notification documentation is included in Attachment 3.

On November 6, 2024, SMA personnel performed a visual inspection of the secondary containment to verify liner integrity as outlined in in Paragraph (5)(a) of Subsection A of 19.15.29.11 NMAC.

Visual observation of the liner was completed on all sidewalls and 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 needs repairs or replacement, and liner integrity was confirmed. Photo documentation of the liner inspection is in the Site Assessment Report (Attachment 1).

6.0 Conclusions and Recommendations

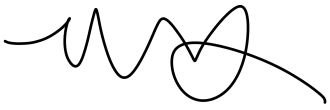
Based on the liner inspection and assessment, SMA concludes the liner integrity is adequate to contain the release related to incident nAPP2429757156, and there is no evidence of release to the environment. Based on the professional activities and site assessment, Devon Energy Production Company respectfully requests closure on the incident that occurred at Cotton Draw Unit #237H.

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 generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

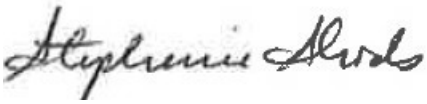
If there are any questions regarding this report, please contact Stephanie Hinds at (505) 302-1127 or Monica Peppin at (575) 909-3418.

Submitted by:
SOUDER, MILLER & ASSOCIATES



Monica Peppin
Project Manager

Reviewed by:



Stephanie Hinds, P.E.
Senior Engineer

REFERENCES:

New Mexico Office of the State Engineer (NMOSE) online water well database
Http://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

ATTACHMENTS:

Attachment 1: Site Assessment Report with Photographs
Attachment 2: Closure Criteria Determination Research
Attachment 3: Correspondence

ATTACHMENT 1: SITE ASSESSMENT REPORT

Site Inspection Report

Client: Devon Energy Corporation
Site Name: Cotton Draw Unit #237H
API: 30-025-41996

Incident ID: nAPP2429757156
Project Manager: Monica Peppin
Project Owner: Jim Raley

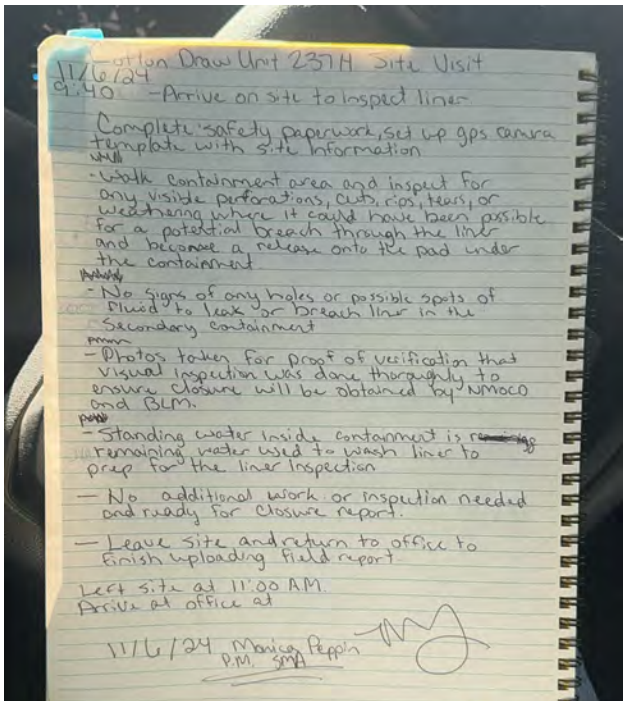
Field Notes

Nov 6, 2024, at 11:01AM

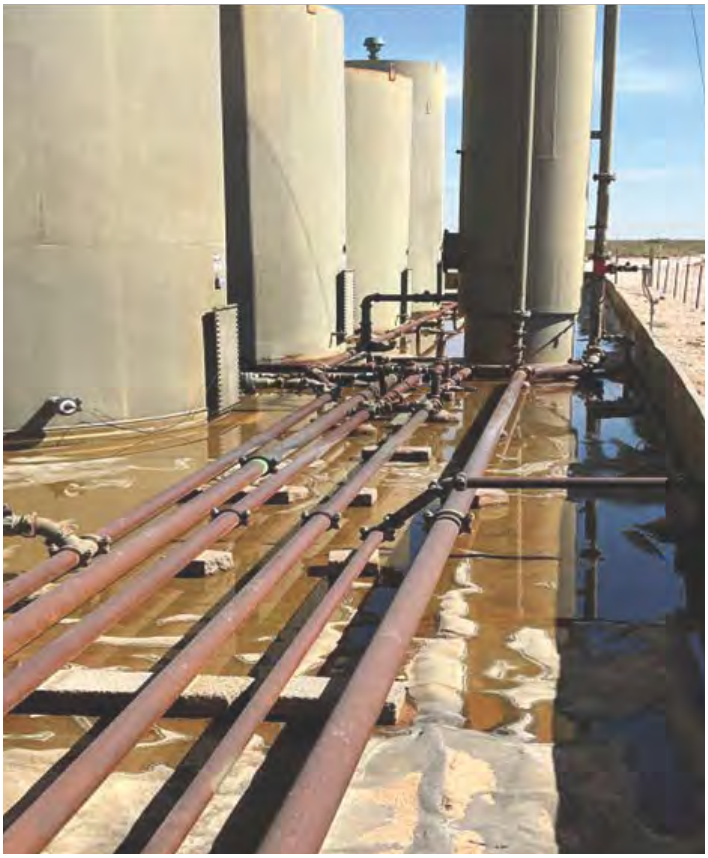
- Arrive on site at 9:40 AM and complete safety paperwork Conduct visual inspection of secondary containment and collect photos of liner in a 360-degree view for proof of liner integrity. Inspected for any visible perforations, cuts, rips, tears, or substantial weathering that could lead to the potential 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.
- Standing water inside containment shows that the secondary containment does not have any signs of potential breach and was from the pressure washing event to clean the lined containment to conduct the inspection.

Visual documentation

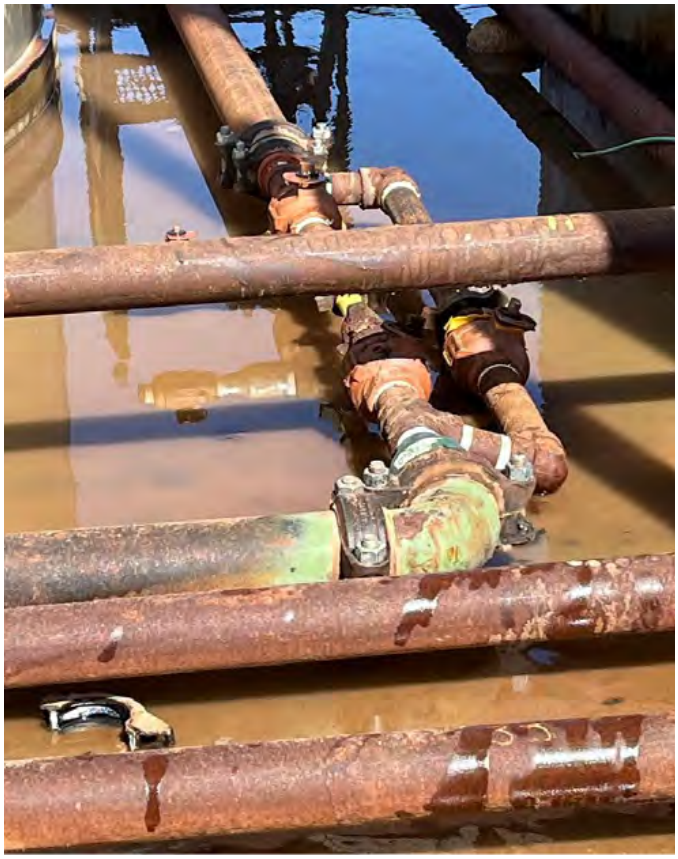
Photograph #1: Site Details and Geographic Coordinates



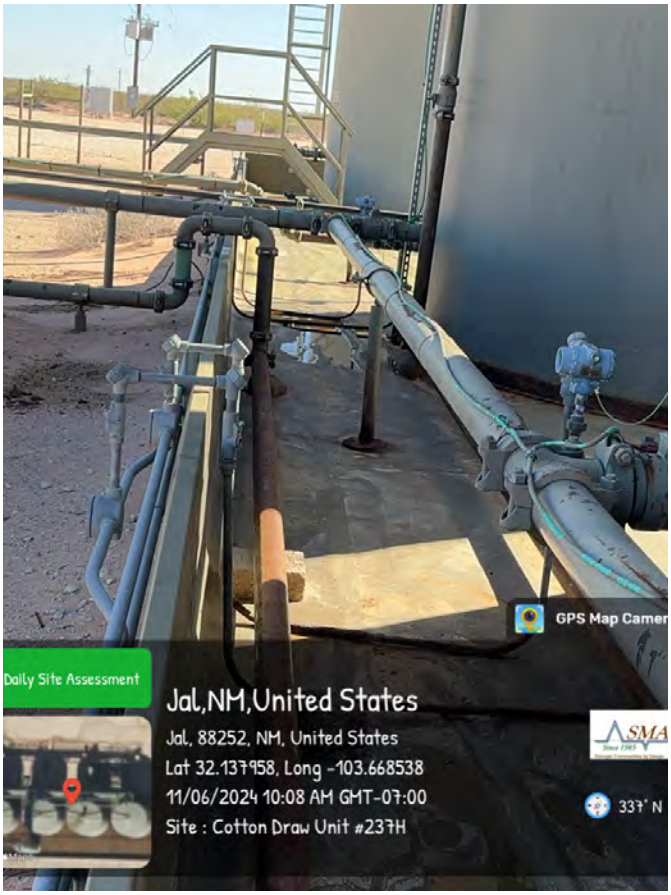
Photograph #2: Hand written notes from site visit



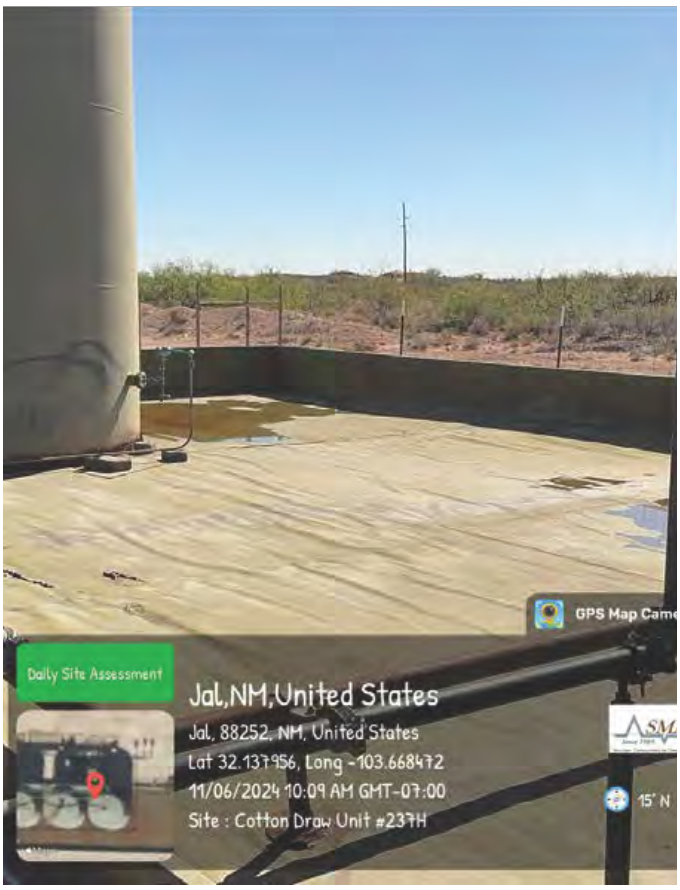
Photograph #3: Containment Area when release occurred



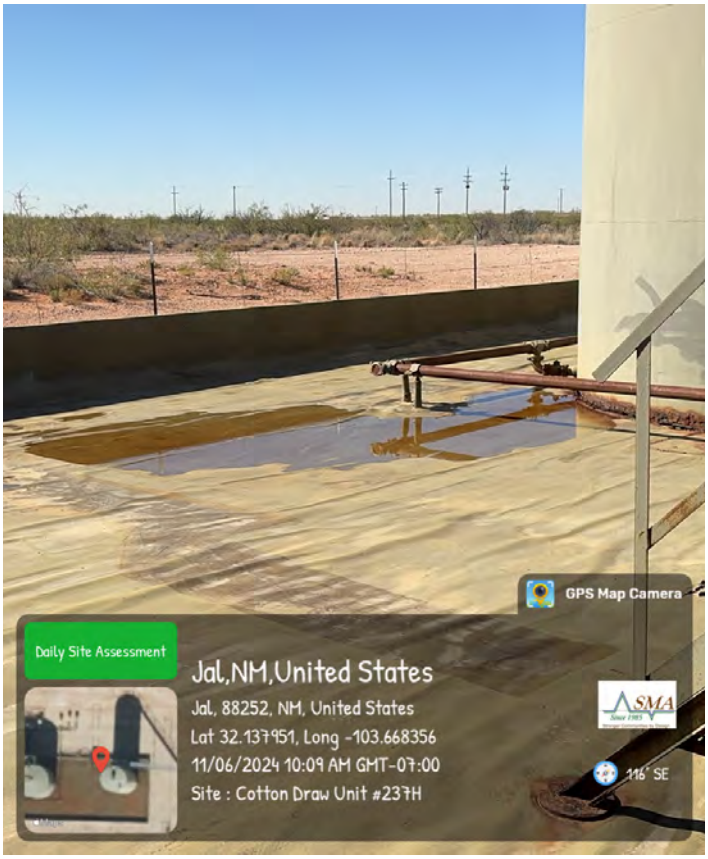
Photograph #4: Point of Release where equipment was repaired



Photograph #5: Facing East showing north side of containment

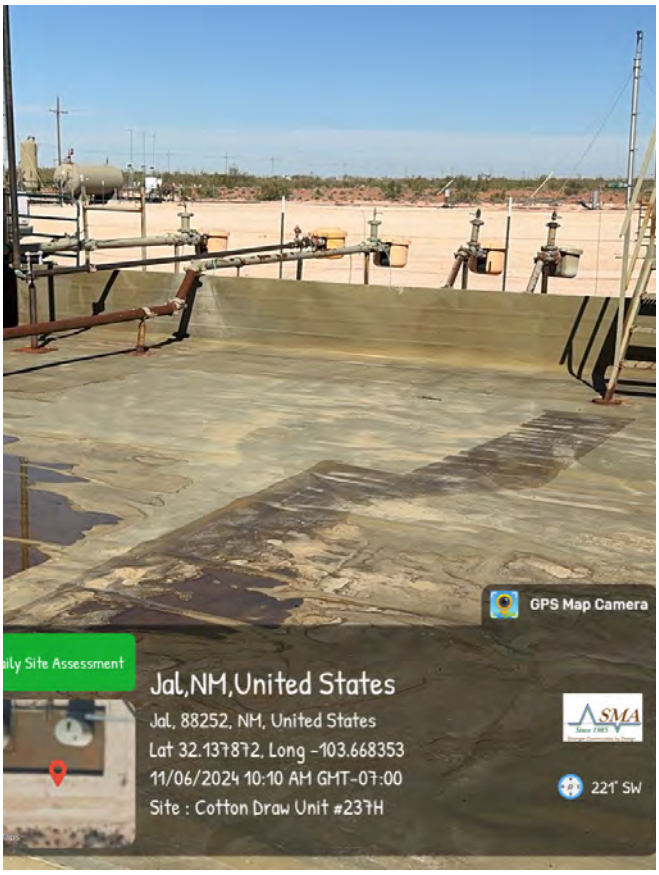


Photograph #6: Facing southeast showing east side of liner

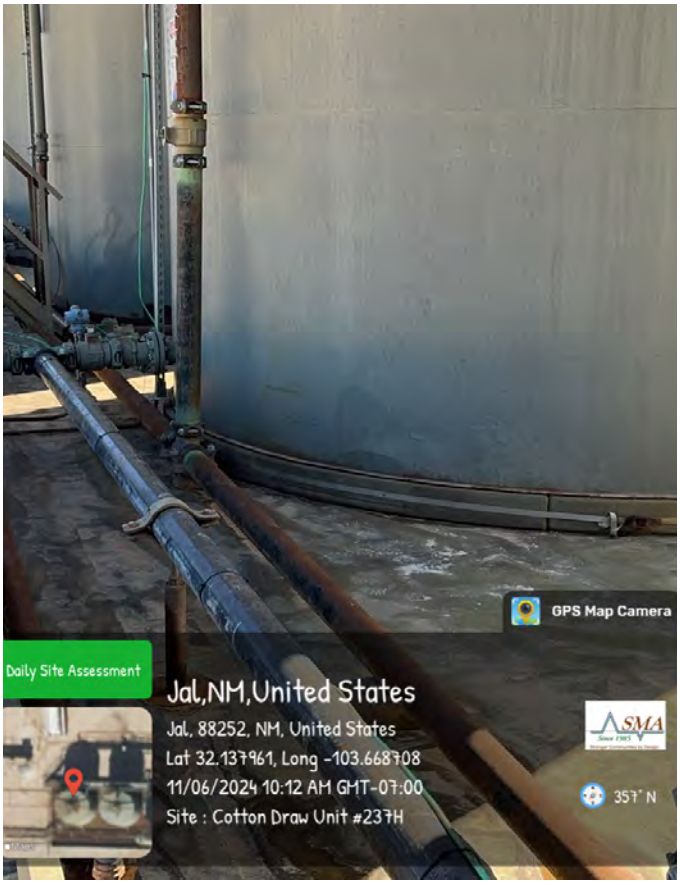


Photograph #7: Facing southwest showing east end of liner

Photograph #8: Facing south showing east wall of containment

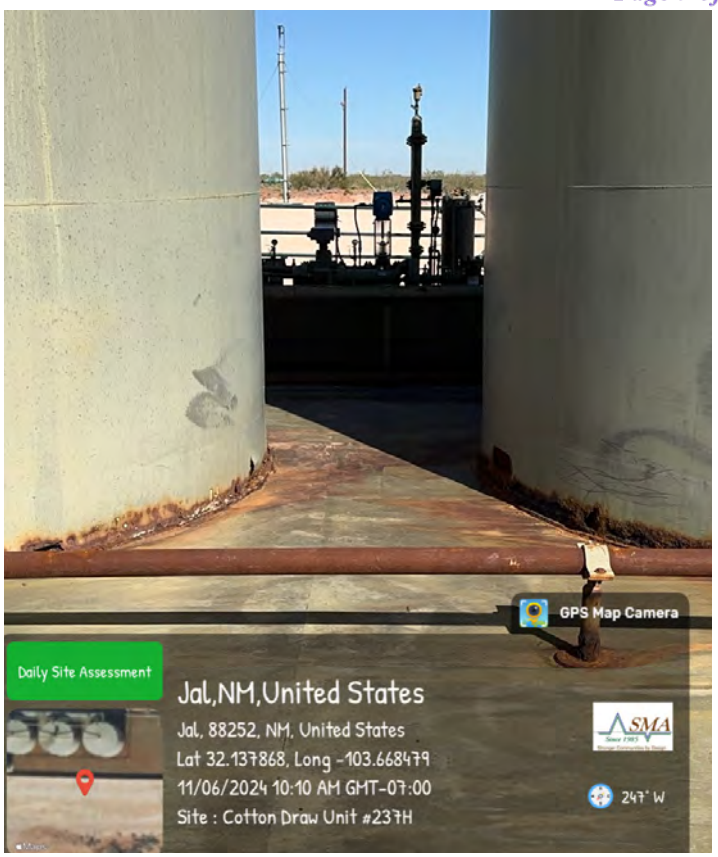


Photograph #9: Facing west showing south area of containment

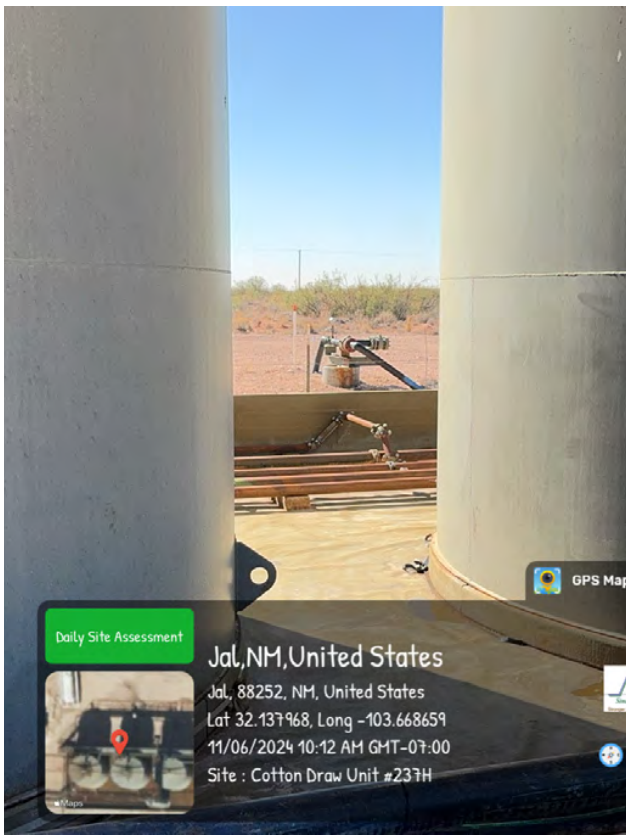


Photograph #10: Facing north showing east area of containment

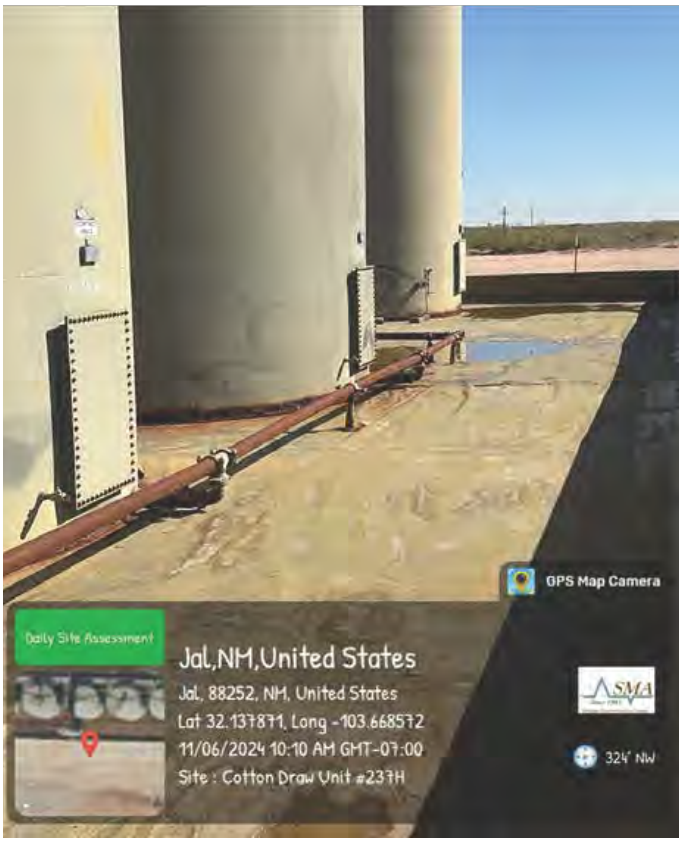
Photograph #11: Facing east from south side of containment for different angle of east area



Photograph #12:Facing north showing liner between tanks

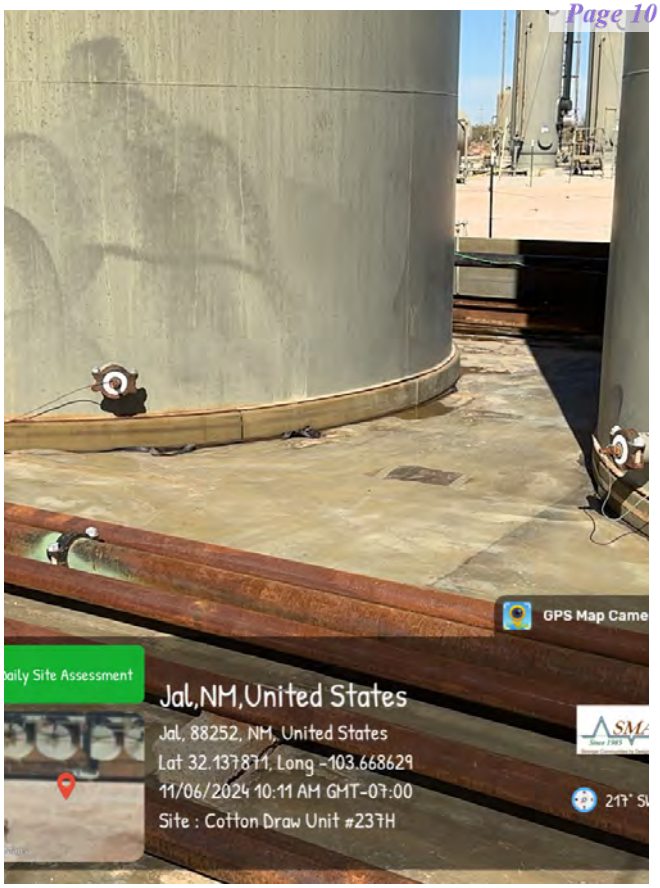


Photograph #13: Facing north showing liner between tanks

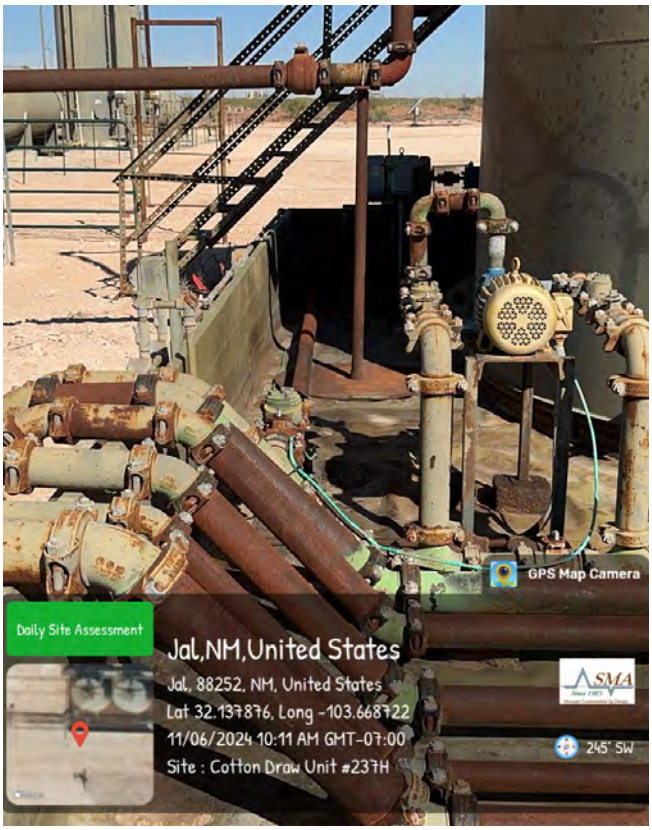


Photograph #14: Facing east showing liner on the south side of containment

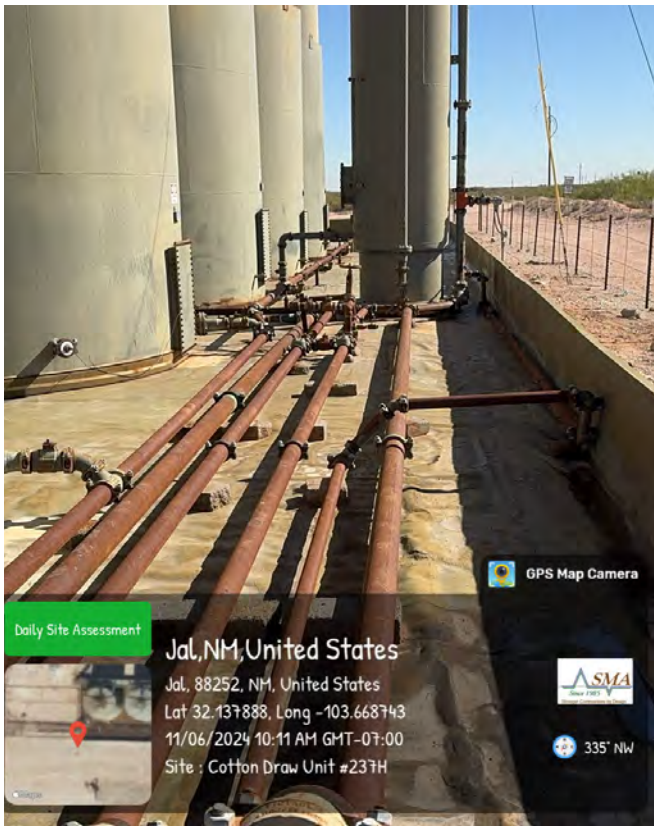
Photograph #15: Facing northeast showing liner between tanks and under piping on southwest corner



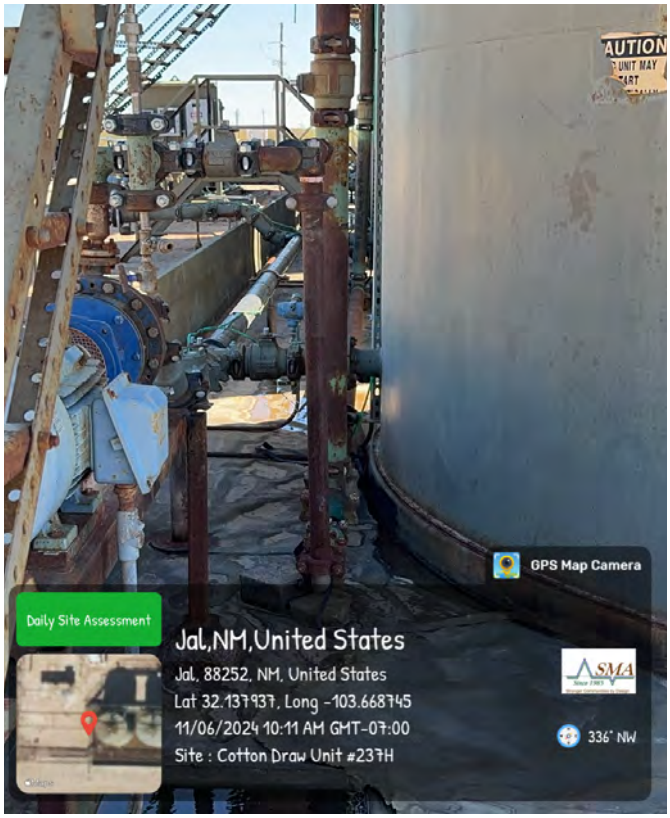
Photograph #16: Facing northwest showing liner between tanks



Photograph #17: Facing north showing west end of containment

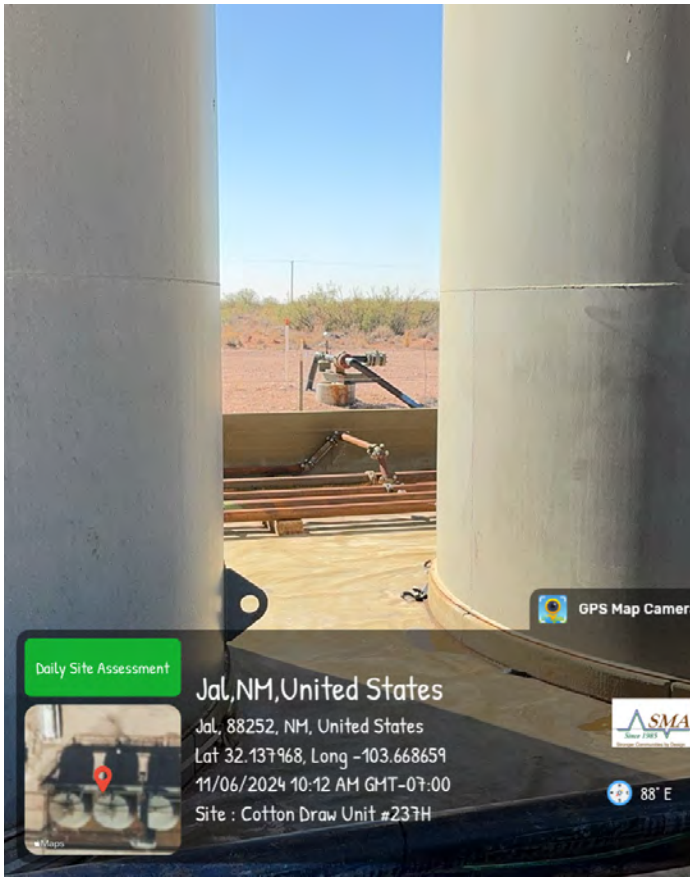


Photograph #18: Facing east showing south side of containment



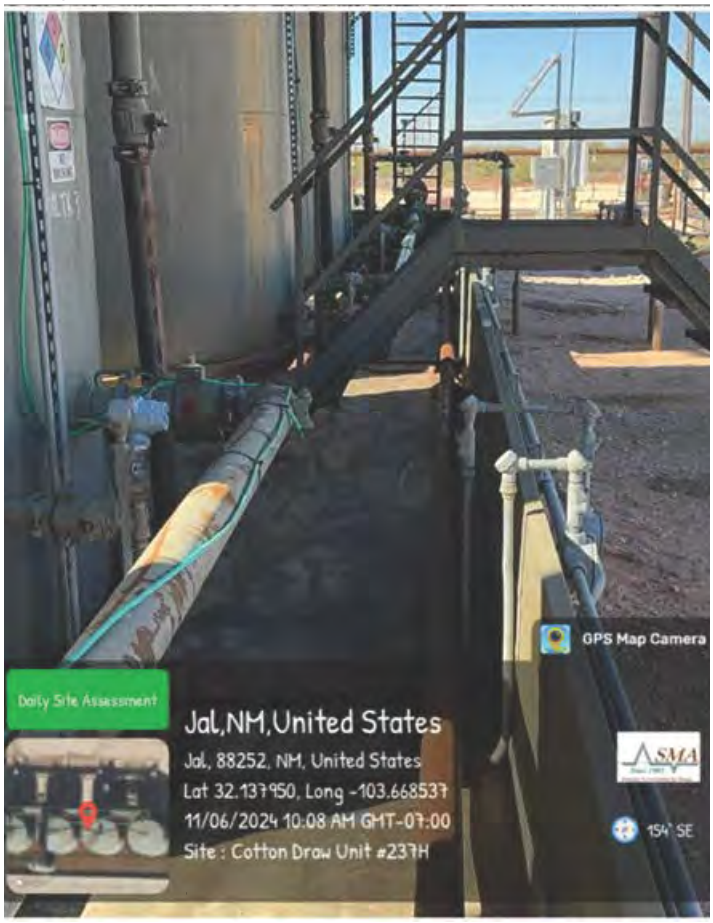
Photograph #19: Facing east on west side on containment

Photograph #20: Facing south showing west end of containment



Photograph #21: Facing east showing liner on north side of containment

Photograph #22: Facing southwest showing liner between tanks



Photograph #23: Facing west showing north side of containment

Technician: Monica Peppin Date: 11/6/2024

Signature: _____

ATTACHMENT 2: CLOSURE CRITERIA DETERMINATION RESEARCH

Cotton Draw Unit #237H

Approx Square Footage of Containment: 4,022 square feet

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD 1 (TW-1)	N/A	C-4634

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Devon Energy	575-748-1838

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6488 7 Rivers Hwy	Artesia	NM	88210

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	8	17.23	N
	LONGITUDE	103	40	4.33	W

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

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

SE SW SW Sec.10 T25S R32S NMPM

2. DRILLING & CASING INFORMATION

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

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
6/7/2022	6/7/2022	Temporary Well	±55	N/A

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): N/A

DATE STATIC MEASURED: 6/13/2022

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

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

CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	55	±6.5	Boring-HSA	--	--	--	--

3. ANNULAR MATERIAL

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

OSE DIT JUN 16 2022 PM 3:13

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO.	C-4634	POD NO.	POD 1	TRN NO.	726471
LOCATION	25S 32E 10 4.3.3	WELL TAG ID NO.	N/A	PAGE 1 OF 2	

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	4	4	Sand, Fine-grained, poorly graded, 2.5 YR 3/6, Dark Red	Y ✓ N	
4	14	10	Caliche, with Fine-grained sand, 7.5 YR 7/4, Pink	Y ✓ N	
14	55	41	Sand, Fine-grained, poorly graded, with Caliche, 7.5 YR 7/6, Reddish Yellow	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
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				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

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

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

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

MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface.
32
CDU 237

OSE DII JUN 16 2022 PM3:13

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

Shane Eldridge, Cameron Pruitt

6. SIGNATURE

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

Jack Atkins — Jackie D. Atkins — 6/16/2022

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO.	C-4634	POD NO.	POD1	TRN NO.	726471	
LOCATION	25S 32E 10 4.3.3			WELL TAG ID NO.	NA	PAGE 2 OF 2

Cotton Draw Unit #237H

11/13/2024, 12:09:06 AM

GIS WATERS PODs

- Active

1:1,128

0 0.01 0.02 0.04 mi

0 0.02 0.04 0.07 km

Maxar, Microsoft, Esri, HERE, iPC, Esri, HERE, Garmin, iPC

Online web user

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

Cotton Draw Unit #237H

Nearest Watercourse: Pecos River
Distance: 20.20 miles (106,682 feet)

U.S. Fish and Wildlife Service
National Wetlands Inventory

Cotton Draw Unit #237H - Nearest Lakebed

Distance: 20.3 miles/107,179 feet

December 11, 2024

Wetlands

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

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

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


Cotton Draw Unit #237H
Nearest Residence: 7.77 miles (41,025 feet)
Cotton Draw Unit 237H
Legend
Cotton Draw Unit 237H
Google Earth
Image © 2024 Airbus
N
3 mi
Residence

Nearest Well: OSE Pod C-02271-POD2
Distance: 7.8 miles (41,189 feet)
Well Use: Stock Watering

Legend
Cotton Draw Unit 237H
Distance to Well

Cotton Draw Unit 237H

OSE Pod C-02271-POD2 Stock Water

Google Earth

N

2 mi

File No.: C-2271

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.

☐ Individual	☐ Corporation
☐ Trustee	☐ Partnership
☐ Estate	☒ Limited Liability Co.
☐ Tribes, Pueblos, Nation	☐ Governmental Entity

1. OWNER OF RECORD (Seller)

Name: OLIVER KIEHNE		Name:	
Phone: 432-448-6337 Phone (Work):	☐ Home ☒ Cell	Phone: Phone (Work):	☐ Home ☐ Cell
a. Owner of Record File No.: C-2271		b. Sub-file No.:	c. Cause No.:

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

Name: Cerberus Land & Cattle Company, LLC		Name:	
Contact or Agent: Aaron K. Davis	check here if Agent ☐	Contact or Agent:	check here if Agent ☐
Mailing Address: 8849 Larston St.		Mailing Address:	
City: Houston		City:	
State: Texas	Zip Code: 77055	State:	Zip Code:
Phone: 832-285-2645 Phone (Work):	☐ Home ☒ Cell	Phone: Phone (Work):	☐ Home ☐ Cell
E-mail (optional): aarondavis1@gmail.com		E-mail (optional):	

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

OSE DIT SEP 29 2021 AM 11:48

3. PURPOSE OF USE & AMOUNT CONVEYED

Check all that apply: ☒ Domestic ☐ Industrial ☒ Livestock ☐ Commercial ☐ Irrigation ☐ Other Uses (specify): _____ ☐ 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: 3.0 Consumptive Use: 3.0 Other (include units): _____
Owner of record has conveyed all or part of said right (please check one) ☒ All ☐ Part	

FOR OSE INTERNAL USE

Change of Ownership, Form wr-02, Rev 10/21/19

File No.: C-2271	Trn. No.:	Well Tag ID No.: (if applicable):	
Trans Desc. (optional): Count		Sub-Basin: CUB	Receipt No.: 2-43843

4. LIST ALL KNOWN POINT(S) OF DIVERSION (POD) FOR THE WATER RIGHT CONVEYED

OSE POD No.:	Well Tag ID No.:	Subdivision and/or Lat/Long or Easting/Northing	Section	Township	Range
C-2271		SW/4 NE/4 SW/4	21	26S	32E

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

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

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

b. Legally Described By: ☐ Public Land Survey System (PLSS) ☐ Hydrographic Survey Report or Map ☐ Irrigation or Conservation District Map ☐ Subdivision PLSS Quarters or Halves, **and/or** Name of Hydrographic Survey or District, **and/or** Name and County of Subdivision	c. PLSS Section **and/or** Map No. **and/or** Lot No.	d. PLSS Township **and/or** Tract No. (Please list each tract individually) **and/or** Block No.	e. PLSS Range	f. Acres	g. Priority
N/A				N/A	12-31-1909

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

i. Place of use is located in the following counties:

j. Place of use is on land owned by: Cerberus Land & Cattle Company, LLC

k. 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

OSE DIT SEP 29 2021 AM 11:48

6. ADDITIONAL STATEMENTS OR EXPLANATIONS

Water right is based on Change of Ownership of Water Right C-2271, filed on February 22, 2012, which is based on Amended Declaration C-2271, filed on February 25, 1994, claiming the use of 3.00 acre-feet per annum for domestic and stock watering purposes from shallow well C-2271. The Declaration described that well was drilled to a depth of 300 feet and constructed with a 6-inch casing, with a static water level of 260 feet. The well was equippied with a Gould 5-horsepower submersible pump and had an output capacity of 15 gallons per minute. The amended declaration stated that the described well "was drilled on September 9, 1992 by W.L. Van Noy." ...and "replaces well under Declaration 13-96 and is located approximately 9 feet north of old well which is capped." a.k.a. "Mexico Wells"

FOR OSE INTERNAL USE

Change of Ownership, Form wr-02, Rev 10/21/19

File No.: C-2271	Trn. No.:	Well Tag ID No. (if applicable):	
Trans Desc. (optional): COWNF		Sub-Basin:	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)), Oliver D Kiehne
Print Name(s)

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

Signature _____ Signature _____

State of Texas)
ss.
County of Sutton)

This instrument was acknowledged before me this 5th day of August A.D., 2021, by (name of owner(s)):

MELANIE SMITH
Notary ID #5244577
My Commission Expires
August 15, 2023

Notary Public: Melanie Smith
My commission expires: 8-15-2023

ACKNOWLEDGEMENT FOR CORPORATION

I, We (name of owner(s)), Cerberus Land & Cattle Company, LLC
Print Name(s)

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

Officer Signature _____ Officer Signature _____

State of Texas)
ss.
County of Sutton)

OSE DIT SEP 29 2021 AM 11:48

This instrument was acknowledged before me this 5th day of August A.D., 20 21, by the following on behalf of said corporation.

Name of Officer: William H. Ditto
Title of Officer: Manager
Name of Corporation Acknowledging: Cerberus Land & Cattle Company, LLC
State of Corporation: Texas

MELANIE SMITH
Notary ID #5244577
My Commission Expires
August 15, 2023

Notary Public: Melanie Smith
My commission expires: 8-15-2023

FOR OSE INTERNAL USE

Change of Ownership, Form wr-02, Rev 10/21/19

File No.:	Tm. No.:	Well Tag ID No. (if applicable):	
Trans Desc. (optional):		Sub-Basin:	Receipt No.:

50-3

LEA COUNTY, NM
KEITH MANES, COUNTY CLERK
000009692
Book2184 Page 207
1 of 3
08/06/2021 03:34 PM
BY WAYNE COLE

Return to First American Title Insurance Company
File No. 14411-2632173 CS

SPECIAL WARRANTY DEED

For valuable consideration, the receipt and sufficiency of which are acknowledged, **BATTLE AXE RANCH, L.L.C.,** a Texas limited liability company ("Grantor"), grants to **CERBERUS LAND & CATTLE COMPANY, LLC**, a Texas limited liability company ("Grantee") whose address is 2319 Pinefield Lane, Houston, Texas 77063, the following real property situated in Lea County, New Mexico:

Surface Title Only described on Exhibit "A" (collectively, the "Property").

The Property includes all easements, licenses, interests, rights, privileges, and appurtenances held by Grantor as of the recordation of this Deed that in any way benefit the Property or relate to the ownership of the Property.

with special warranty covenants.

Witness its hand and seal on the date set forth below.

BATTLE AXE RANCH, L.L.C., a Texas limited liability company

By: Oliver D Kiehne

Name: Oliver D. Kiehne
Title: Member

By: Bridget Kiehne

Name: Bridget Kiehne
Title: Member

[Representative Capacity]

STATE OF Texas
SS
COUNTY OF Sutton

OSE DIT SEP 29 2021 AM 11:49

The foregoing instrument was acknowledged before me this 5th day of August, 2021, by Oliver D. Kiehne as Member of BATTLE AXE RANCH, L.L.C., a Texas limited liability company, on behalf of said company.

Witness my hand and official seal.

NOTARY PUBLIC STATE OF TEXAS
MELANIE SMITH
Notary ID #5244577
My Commission Expires
August 15, 2023

Melanie Smith

Notary Public
My commission expires: 8-15-2023

LEA COUNTY, NM
KEITH MANES, COUNTY CLERK
000009692
Book2184 Page 207
2 of 3
08/06/2021 03:34 PM
BY WAYNE COLE

File No.: 14411-2632173 (CS)
Special Warranty Deed – continued
A.P.N.: 78979

[Representative Capacity]

STATE OF Texas
SS
COUNTY OF Sutton

The foregoing instrument was acknowledged before me this 5th day of August, 2021, by Bridget Kiehne as Member of BATTLE AXE RANCH, L.L.C., a Texas limited liability company, on behalf of said company.

Witness my hand and official seal.

Melanie Smith
Notary Public
My commission expires: 8-15-2023

MELANIE SMITH
Notary ID #5244577
My Commission Expires
August 15, 2023

LEA COUNTY, NM
KEITH MANES, COUNTY CLERK
000009692
Book2184 Page 207
3 of 3
08/06/2021 03:34 PM
BY WAYNE COLE

EXHIBIT "A"

File No.: 14411-2632173 (CS)

All lands are located in Lea County, New Mexico

For Surface Title Only:

Township 26 South, Range 33 East, N.M.P.M.

Section 9: S1/2
Section 10: W1/2 SW1/4
Section 21: N1/2, E1/2 SE1/4
Section 28: E1/2NE1/4

Township 26 South, Range 32 East, N.M.P.M.

Section 21: NE1/4SW1/4

Township 26 South, Range 33 East, N.M.P.M.

Section 15: S1/2SE1/4, W1/2NW1/4, SW1/4
Section 22: S1/2
Section 23: SW1/4, N1/2NW1/4, SW1/4NW1/4, W1/2E1/2
Section 26: W1/2W1/2
Section 27: N1/2
Section 35: Lots 1-4, NW1/4NW1/4

80-2

26738

WARRANTY DEED

Oliver D. Kiehne and Bridget Kiehne, husband and wife, hereby grants to **Battle Axe Ranch, LLC**, a Texas limited liability company, whose address is P.O. Box 135, Orla, Texas, 79770, the following described property, including any improvements, located in Lea County, New Mexico:

"Mexico Wells"
NE/4SW/4 Section 21
Township 26 South, Range 32 East, NMPM, Lea County, New Mexico

N.M. State Lease: Portion of State Lease #GT2519
Section 2 Township 26 South, Range 32 East NMPM
Section 16 Township 26 South, Range 32 East, NMPM
Lots 1,2,3,4 N/2N/2, Section 32 Township 26 South, Range 32 East, NMPM
Lots 1,2,3,4 N/2N/2, Section 36 Township 26 South, Range 32 East, NMPM
Lea County, New Mexico

BLM Lease: BLM permit # 76052

"Goedeke and Needmore"

S/2 Section 9,
W/2SW/4 Section 10
N/2, E/2 SE/4 Section 21,
E/2NE/4 Section 28
Township 26 South, Range 33 East, NMPM, Lea County, New Mexico

N.M. State Leases:
Portion of **State Lease #GT2519**:
Section 16 Township 26 South, Range 33 East, NMPM
E/2 Section 17 Township 26 South Range 33 East NMPM
State Lease #GO1355:
Lots 1,2,3, 4 N/2N/2 Section 32 Township 26 South, Range 33 East, NMPM, All in Lea County, New Mexico

BLM Lease: BLM permit # 76046 Goedeke Grazing Cell

Subject to those restrictions, easements and reservations of record.

Witness my hand and seal this 10th day of March, 2014.

Oliver D. Kiehne

Bridget Kiehne

Oliver D. Kiehne

Bridget Kiehne

BOOK 1922 PAGE 338

ACKNOWLEDGEMENT FOR NATURAL PERSONS

State of Texas)

) ss

County of Lubbock)

This instrument was acknowledged before me this 10th day of March, 2014.

Colby McClellan
Notary Public

My commission expires February 10, 2017

COLBY GARRETT McCLELLAN
NOTARY PUBLIC
STATE OF TEXAS
MY COMM. EXP. 2/10/17

26738

STATE OF NEW MEXICO
COUNTY OF LEA
FILED

OCT 23 2014

at 12:15 o'clock P M
and recorded in Book
Page
Par Chappelle, Lea County Clerk
By A Beauchamp Deputy

COUNTY CLERK, NEW MEXICO
SEAL
LEA COUNTY,

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

JOHN R. D'ANTONIO JR., P.E.
State Engineer

DISTRICT II
1900 WEST SECOND STREET
ROSWELL, NEW MEXICO 88201
(575) 622-6521
FAX: (575) 623-8559

November 15, 2021

CERBERUS LAND & CATTLE COMPANY, LLC
AARON DAVIS
8849 LARSTON ST.
HOUSTON, TX 77055

RE: CHANGE OF OWNERSHIP – C-2271

Greetings:

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

According to Section 72-1-2.1, you must record the Change of Ownership with the Clerk of the county in which the water rights are located. The filings shall be public notice of the existence and contents of the instruments so recorded.

Sincerely,

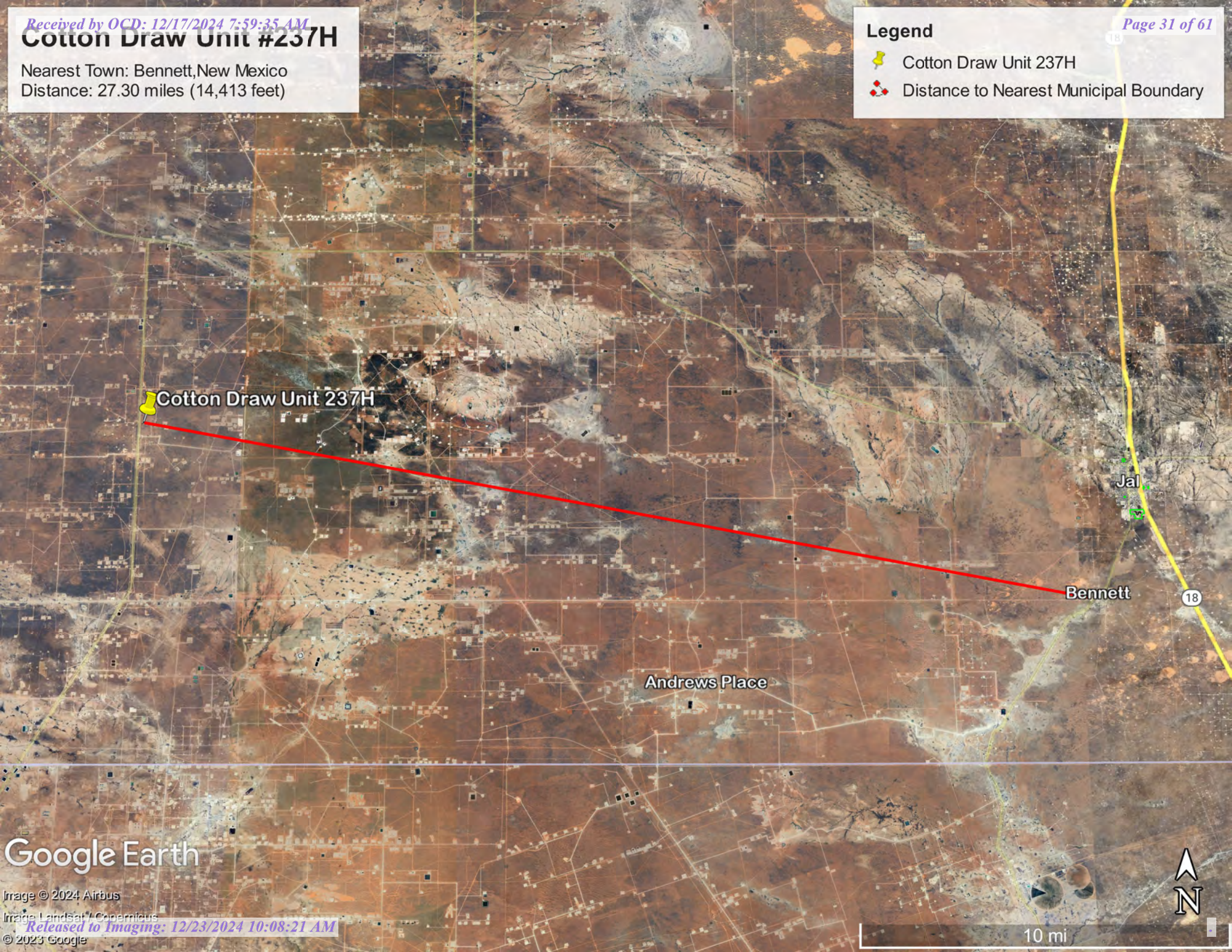
Lisa Fresquez

Lisa Fresquez
Water Resource Allocation Program
Water Rights Division

LF: Enclosures

Cotton Draw Unit #237H

Nearest Town: Bennett,New Mexico
Distance: 27.30 miles (14,413 feet)



Cotton Draw Unit #237H

Nearest Wetland: Riverine
Distance: 2.30 miles (12,159 feet)

Cotton Draw Unit #237H - Subsurface Mines Map

12/11/2024, 8:57:30 PM

1:2,064,000

0 15 30 60 mi

0 20 40 80 km

X Coal Mine Locations

Mining_Ghost_Towns

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

Monica Peppin

New Mexico Bureau of Geology | 12/23/2024 | Bureau of Land Management | New Mexico Bureau of Geology and Mineral Resources | New Mexico Bureau of Geology & Mineral Resources |

Cotton Draw Unit #237H

0 0.03 0.05 0.1 mi

N

New Mexico State Land Office

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

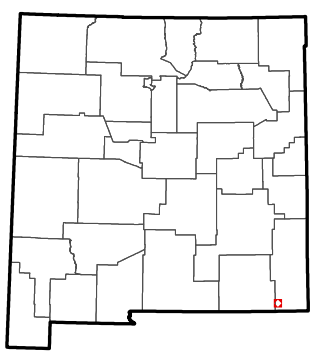
Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico.

Map Created: 11/14/2024

- User drawn points
- Oil and Gas Leasing Restrictions
- Energy Leases
- Agricultural Leases
- Oil and Gas Leases
- Minerals Leases
- Commercial Leases

New Mexico State Trust Lands
- Subsurface Estate
- Surface Estate
- Both Estates

Karst_Potential_NM
Potential
- High
- Medium
- Low



Cotton Draw Unit #237H - Flood Zone

FEMA

103°40'26"W 32°8'32"N

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

1:6,000

103°39'48"W 32°8'1"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

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

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/6/2024 at 3:58 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

Map Scale: 1:1,190 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

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

MAP LEGEND

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

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 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 Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PT	Pyote loamy fine sand	5.8	100.0%
Totals for Area of Interest		**5.8**	**100.0%**

Lea County, New Mexico

PT—Pyote loamy fine sand

Map Unit Setting

National map unit symbol: dmqp
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 200 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Pyote and similar soils: 85 percent
Minor components: 15 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 25 inches: loamy fine sand
Bt - 25 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 5.3 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

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

Palomas
Percent of map unit: 7 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 21, Sep 3, 2024

USDA Natural Resources Conservation Service

Ecological site R070BD003NM
Loamy Sand

Accessed: 11/07/2024

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

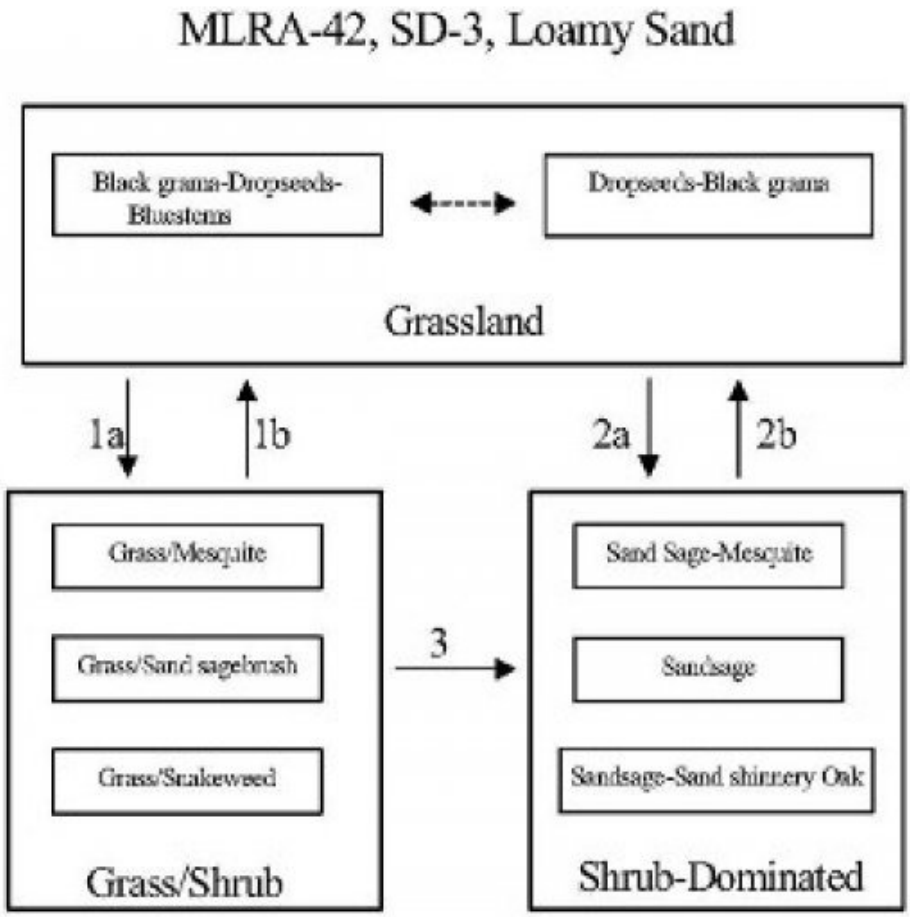
Overview

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

2.a 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/threeawns cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite/dropseed/threeawn and mesquite/snakeweed abundance

Additional community tables

Table 7. Community 1.1 plant community composition

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

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

Animal community

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

Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.
Hydrologic Interpretations
Soil Series Hydrologic Group
Berino B
Kinco A
Maljamar B
Pajarito B
Palomas B
Wink B
Pyote A

Recreational uses

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

Wood products

This site has no potential for wood products.

Other products

This site is suitable for grazing by all kinds and classes of livestock at any time of year. In cases where this site has been invaded by brush species it is especially suited for goats. Mismanagement of this site will cause a decrease in species such as the bluestems, blsck 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, shinery 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.

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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.

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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.

McPherson, Guy R. 1995. The role of fire in the desert grasslands. In: McClaran, Mitchel P.; Van Devender, Thomas R., eds. The desert grassland. Tucson, AZ: The University of Arizona Press: 130-151.

Pettit, Russell D. 1986. Sand shinnery oak: control and management. Management Note 8. Lubbock, TX: Texas Tech University, College of Agricultural Sciences, Department of Range and Wildlife Management. 5 p.

Contributors

Don Sylvester
Quinn Hodgson

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. **Number and extent of rills:**

2. **Presence of water flow patterns:**

3. **Number and height of erosional pedestals or terracettes:**

4. **Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):**

5. **Number of gullies and erosion associated with gullies:**

6. **Extent of wind scoured, blowouts and/or depositional areas:**

7. **Amount of litter movement (describe size and distance expected to travel):**

---

8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):**

---

9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):**

---

10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:**

---

11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):**

---

12. **Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):**

    Dominant:

    Sub-dominant:

    Other:

    Additional:

---

13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):**

---

14. **Average percent litter cover (%) and depth (in):**

---

15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):**

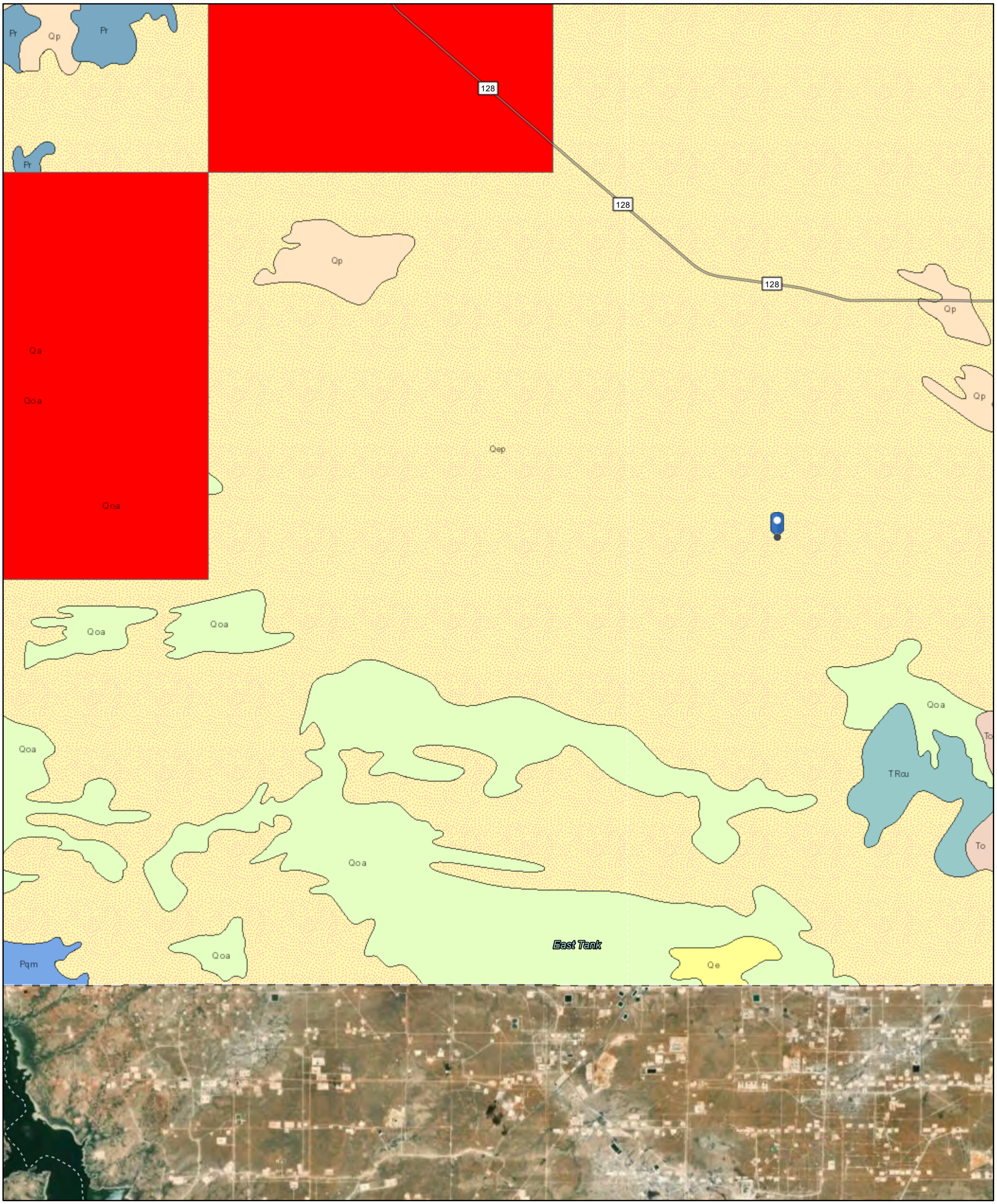
---

16. **Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:**

---

17. **Perennial plant reproductive capability:**

Cotton Draw Unit #237H



11/7/2024, 12:38:27 AM

Lithologic Units

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

1:144,448

0 1.25 2.5 5 mi

0 2.25 4.5 9 km

Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, 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] nAPP2429757156 Cotton Draw Unit #237H Liner Inspection Notification

From Raley, Jim <jim.raley@dvn.com>
Date Mon 11/4/2024 1:03 PM
To Monica Peppin <Monica.Peppin@soudermiller.com>
Cc Stephanie Hinds <stephanie.hinds@soudermiller.com>; Reid Allan <reid.allan@soudermiller.com>

Submitted to portal 11/4/2024

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

devon

From: Monica Peppin <Monica.Peppin@soudermiller.com>
Sent: Monday, November 4, 2024 7:31 AM
To: Raley, Jim <Jim.Raley@dvn.com>
Cc: Stephanie Hinds <stephanie.hinds@soudermiller.com>; Reid Allan <reid.allan@soudermiller.com>; ocd.enviro@emnrd.nm.gov; blm_nm_cfo_spill@blm.gov
Subject: [EXTERNAL] nAPP2429757156 Cotton Draw Unit #237H Liner Inspection Notification

All:

SMA anticipates conducting a liner inspection at the Cotton Draw Unit #237H on Wednesday, November 6, 2024:
Proposed Date: 11.6.24
Proposed Time Frame: On-site 9:30 AM
Site Name: Cotton Draw Unit 237H
Incident Number: nAPP2429757156
API: 30-025-41966 (NMLC061936)

Site Name and Incident ID:	**Cotton Draw Unit #237H** **nAPP2429757156**
Containment surface area:	**Approx, 4,035 sq ft containment**
Have all impacted materials been removed from the liner:	**All materials have been removed and liner pressure washed for liner inspection**
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	**Wednesday, November 6, 2024**
Time liner inspection will commence:	**9:30 AM**
Contact information:	**Monica Peppin 575.909.3418**
Navigation to site:	**From intersection 128 and C1 (Orla Rd) travel south for 5.73 miles, turn left onto lease road (Cotton Draw rd) traveling east for 0.35 miles, turn left onto lease road travelling north for 0.39 miles, and left again travelling west for 0.17 miles ending onto CDU 237H pad.**

If you have any questions or concerns, please contact me via email or phone.

Thanks,
Monica

SMA Since 1985

Monica Peppin, A.S.

Project Manager

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 412716

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 412716
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2429757156**
Incident Name	**NAPP2429757156 COTTON DRAW UNIT 237H @ 30-025-41996**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-025-41996] COTTON DRAW UNIT #237H**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	COTTON DRAW UNIT 237H
Date Release Discovered	10/23/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Corrosion | Flow Line - Production | Produced Water | Released: 5 BBL | Recovered: 5 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)	*Not answered.*

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QUESTIONS (continued)

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	Action Number: 412716
	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)	**More info needed to determine if this will be treated as 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@dvn.com Date: 12/17/2024

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QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 412716
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	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 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	11/01/2024
On what date will (or did) the final sampling or liner inspection occur	11/06/2024
On what date will (or was) the remediation complete(d)	11/06/2024
What is the estimated surface area (in square feet) that will be remediated	4022
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 (continued)

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	Action Number: 412716
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QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
Is (or was) there affected material present needing to be removed	Yes
Is (or was) there a power wash of the lined containment area (to be) performed	Yes
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 12/17/2024
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.	

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 (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 412716
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Liner Inspection Information	
Last liner inspection notification (C-141L) recorded	**399036**
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	**11/06/2024**
Was all the impacted materials removed from the liner	**Yes**
What was the liner inspection surface area in square feet	**4035**

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	4022
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@dvn.com Date: 12/17/2024

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CONDITIONS

Action 412716

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 412716
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	12/23/2024