Liner Inspection Closure Report

Mimosa 18 CTB 1

Prepared For

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

NMSLO – Environmental Compliance Office
310 Old Santa Fe Trail, P.O. Box 1148
Santa Fe, NM 87504-1148

Responsible Party and Consultant Contact Information

Devon Energy Production Company
Jim Raley
575.689.7597
jim.raley@dvn.com

KLJ Engineering
Monica Peppin
575.909.3418
monica.peppin@kljeng.com

Incident Details

Site Name: *Mimosa 18 CTB 1*
Incident ID*: nAPP2511828007*
Facility ID*: fAPP2405030777*

Lease ID*: NMNM106355467*
PLSS/County*: F-18-20S-30E/Eddy County*
Lat/Long: *32.57435467, -104.0141241*

Report Contents

June 26, 2025

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

SUBJECT: Liner Inspection and Closure Report for Mimosa 18 CTB 1 – May 21, 2025 Site Visit

Incident ID: nAPP2511828007
Facility ID (Name): fAPP2405030777 (MIMOSA 18 CTB 1)
Facility Location: Unit F of Section 18, Township 20 South, Range 30 East, New Mexico
Facility GPS Coordinates: 32.57435467, -104.0141241
Eddy County, New Mexico

Introduction

KLJ Engineering (KLJ) has prepared this report on behalf of Devon Energy Production Company, LP (Devon) to detail the recent liner inspection conducted at the Mimosa 18 CTB 1 (Site) on May 21, 2025, following the release of produced water that occurred on April 27, 2025.

Site Information and Background

The Site is located approximately 10.28 miles northeast of Carlsbad, New Mexico, on New Mexico State Trust Land Office (SLO) property. The Site lies within Unit F, Section 18, Township 20 South, Range 30 East, in Eddy County. KLJ conducted a liner inspection and associated site characterization in accordance with 19.15.29.11 and 19.15.29.12 of the New Mexico Administrative Code (NMAC) to assess the integrity of the containment system and evaluate any potential environmental impacts resulting from a release.

Release Description and Immediate Response

On April 27, 2025, a Devon lease operator discovered a leak on the water line located near the strainer on the water transfer pump inside the secondary containment, resulting in the release of approximately 25 barrels (bbls) of produced water. Initial response actions were conducted by the operator and included source elimination, photographic documentation of the affected area, volume estimation, and an attempt to recover released fluids. Photographic documentation of the secondary containment, liner, tanks, and equipment where the release occurred is included in the Liner Inspection Field Notes & Photolog Report (**Appendix A**).

Devon submitted the initial Notice of Release (NOR) to the New Mexico Energy, Minerals, and Natural Resources Department – Oil Conservation Division (NMOCD) on April 28, 2025, via the Operator's Electronic Permitting and Payment Portal. The initial Form C-141 was subsequently submitted on April 30, 2025.

Site Characterization Summary

The Site lies within Qoa – older alluvial deposits of upland plains and piedmont areas (middle to lower Pleistocene) and calcic soils and eolian cover sediments of High Plains region (New Mexico Bureau of Geology and Mineral Resources). Terrain for the Site and immediate surrounding area includes ridges,

plains, and hills at elevations ranging from 2,842 to 5,000 feet above mean sea level (amsl). Parent material consists of residuum weathered from gypsum, with 10 to 25 inches of average annual precipitation. Soil within the Site tends to be well-drained, with high runoff potential and high to moderate water-holding capacity.

The USDA – Web Soil Survey (WSS) identifies the predominant soil type at the Site as the Reeves Gypsum land complex that is deep to moderately deep, with surface textures ranging from loam, silt loam, very fine sandy loam, or clay loam. Substratum includes a loam, silty clay loam, clay loam, or silt loams. Subsoil consists of silt loam, clay loam, silty clay loam, gravelly loam, gravelly clay loam, or very gravelly clay loam, gravelly clay loam, or very gravelly.

Vegetation reflects a grassland community, consisting of mid and short grasses such as black grama, sand dropseed, and threeawn species, along with scattered shrubs like mesquite, and yucca. Forbs are present but not dominant. The vegetation reflects a drought-tolerant, arid-adapted community, with grass cover varying based on grazing intensity and precipitation patterns. The site supports a mix of warm-season perennials adapted to sandy soils and shallow rooting depths, forming a stable plant community under proper grazing management.

No surface water features were identified within 300 feet of the Site. The nearest significant watercourse is 4.28 miles northwest; the closest playa lake is 1.06 miles northeast, and the nearest wetland is 1.42 miles southeast (USFWS NWI, 2025). These distances comply with the requirements of 19.15.29.12(C)(4) NMAC.

Per the New Mexico Office of the State Engineer (NMOSE) Points of Diversion (POD) Map, the nearest POD is C-01629-POD1, located 1.02 miles southeast, with a recorded groundwater depth of 102 feet below ground surface (bgs). The nearest freshwater well used for stock water, POD CP-00832-POD1, is located 1.26 miles northwest of the Site.

Karst potential for the Site is identified as high, with the nearest area of medium karst potential located 1.68 miles to the southeast. The Site is in a FEMA flood hazard area identified as FEMA Zone X (undetermined hazard); the nearest identified FEMA flood hazard area, classified as Zone A, is 0.88 miles to the northeast.

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

Closure Criteria

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

evidence of escape, it may qualify for reduced remediation requirements or a No Further Action (NFA) determination.

Table 1: Release Information and Closure Criteria Limits			
Depth to Ground Water Determination: < 50 feet bgs			
Site Name	Mimosa 18 CTB 1	Company	Devon Energy Production Company, LP
Facility ID/API Number	fAPP2405030777	PLSS/GPS	F-18-20S-30E/32.57435467, -104.0141241
Lease ID	NMNM106355467	Land Status	State Trust Land
Incident ID	nAPP2511828007	Date Of Release	4/27/2025
Source of Release	Pinhole leak on water line inside containment	Volume Released/Recovered	25 bbls/25 bbls pw
Specific Features	High Karst Potential, DTGW pod not within 0.5-mile radius, no surface water within proximity, and FEMA Zone X		

Liner Inspection Activities

KLJ Environmental Specialists conducted a site visit on May 21, 2025, to perform a liner inspection. Notification was submitted to Devon via email on May 19, 2025, and official notification was submitted via the Operator's Electronic Permitting and Payment Portal on May 19, 2025, in accordance with NMAC 19.15.29.11(A)(5)(a)(iii) prior to the inspection. A copy of the notification is provided in **Appendix C**. KLJ personnel conducted a visual inspection of the secondary containment to verify liner integrity and confirmed that it was intact with no observed integrity issues. The visual inspection included observations for any perforations in the liner that could lead to a breach of the secondary containment. The inspection concluded with no signs of rips, cuts, tears, or weathering in any condition that showed signs of the liner needing repairs or replacements. Photographic documentation of the liner inspection is included in the Liner Inspection Field Notes & Photolog Report (**Appendix A**).

Conclusion

Based on the findings of the liner inspection, KLJ concludes that liner integrity is adequate to contain fluids and there are no further actions required in relation to incident nAPP2511828007.

Based on the site assessment and activities conducted, Devon respectfully requests closure of incident nAPP2511828007 with a No Further Action (NFA) determination.

Submitted and prepared by:
KLJ Engineering

Written By
Name: Monica Peppin
Title: Environmental Specialist II

Signature: _____

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

Signature: _____

Included Appendices

Appendix A – LINER INSPECTION FIELD NOTES & PHOTOLOG REPORT
Appendix B – CLOSURE CRITERIA RESEARCH
Appendix C – CORRESPONDENCE

APPENDIX A

LINER INSPECTION FIELD NOTES & PHOTOLOG REPORT

Environmental Liner Inspection Field Notes & Photolog Report

Site & Incident Information

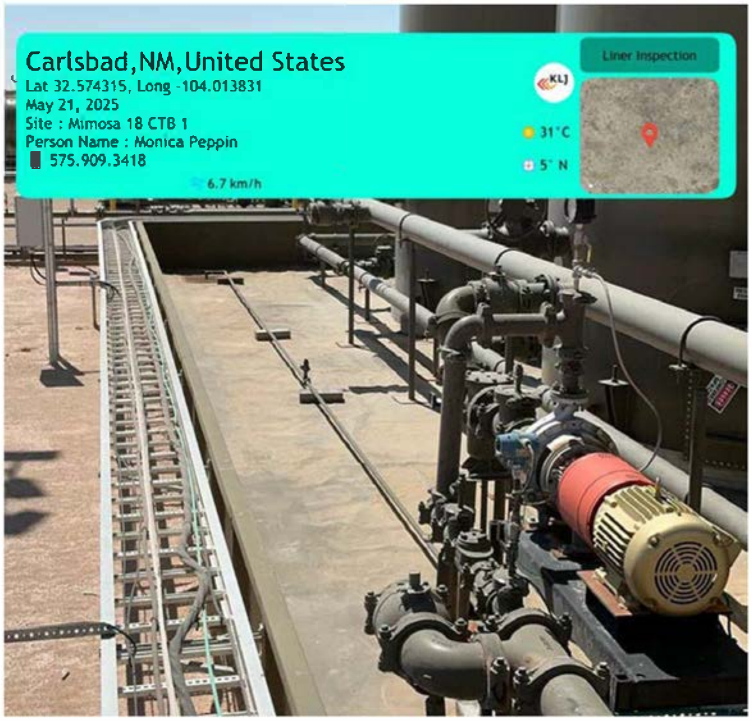
Client:	Devon Energy	**Date:**	5.21.2025
Site Name:	Mimosa 18 CTB 1	**Arrival Time:**	10:30 AM
Incident ID:	nAPP2511828007		
Client Contact:	Jim Raley		
Land Status:	BLM		
County:	Eddy		
Lease ID:	NMNM089057		
Facility ID/API #:	fAPP2405030777		
32.57435467, -104.0141241			

Photo of Lease Sign

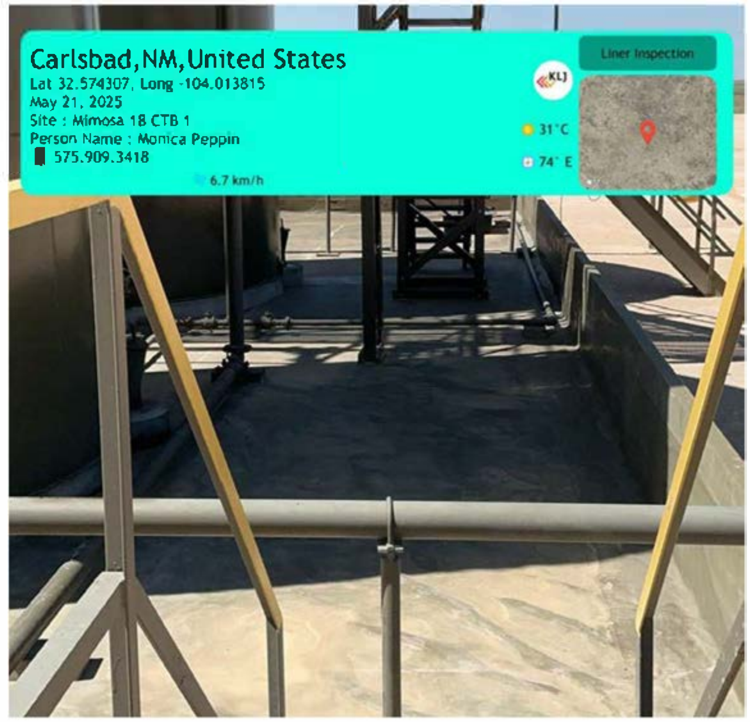
Observations and Field Notes

- 10:37 AM - Arrive on site. Complete JHA and check surroundings for hazards.
- 10:43 AM - Begin liner inspection by walking around containment area and checking for any perforations, rips, tears, punctures, or degrading of liner.
- 10:55 AM - Liner inspected around all equipment, tanks, containment walls, and from outside wall area of containment to ensure integrity.
- 10:59 AM - Complete walk around and begin taking photos of containment area. Photos taken at all different angles and positions around the containment to verify liner integrity.
- 11:05 AM - Liner was cleaned prior to inspection by crew with pressure washer.

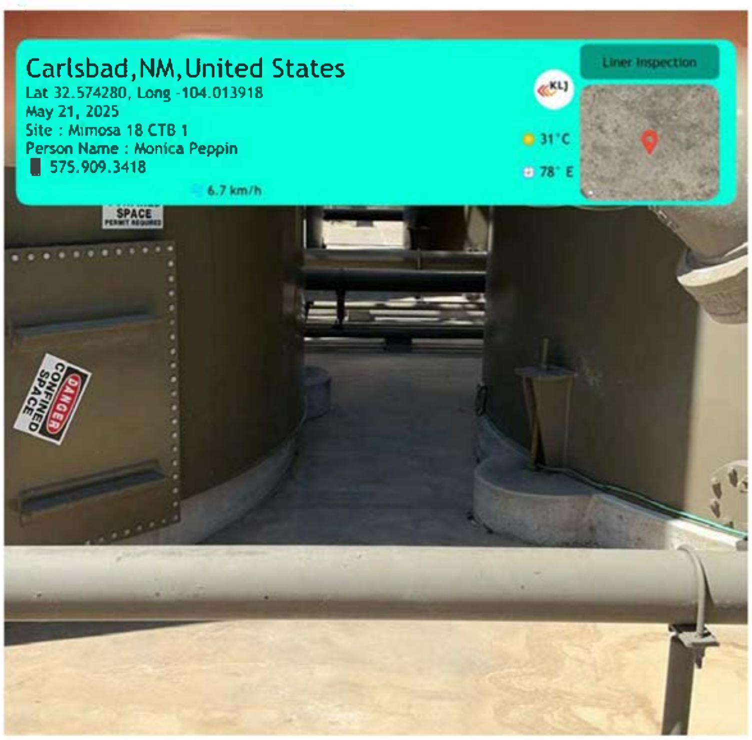
Photolog



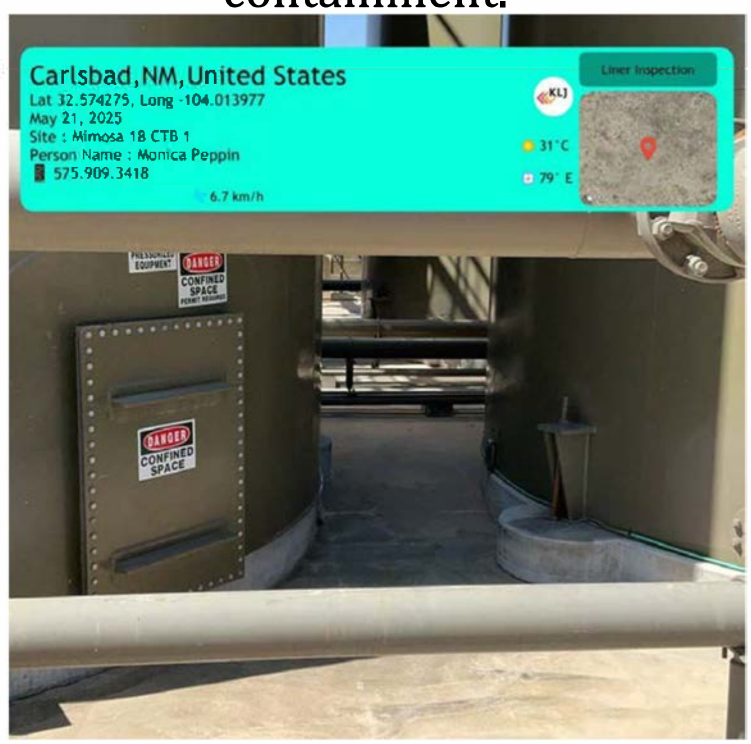
West view of liner on south wall.



Looking north viewing east side of containment.



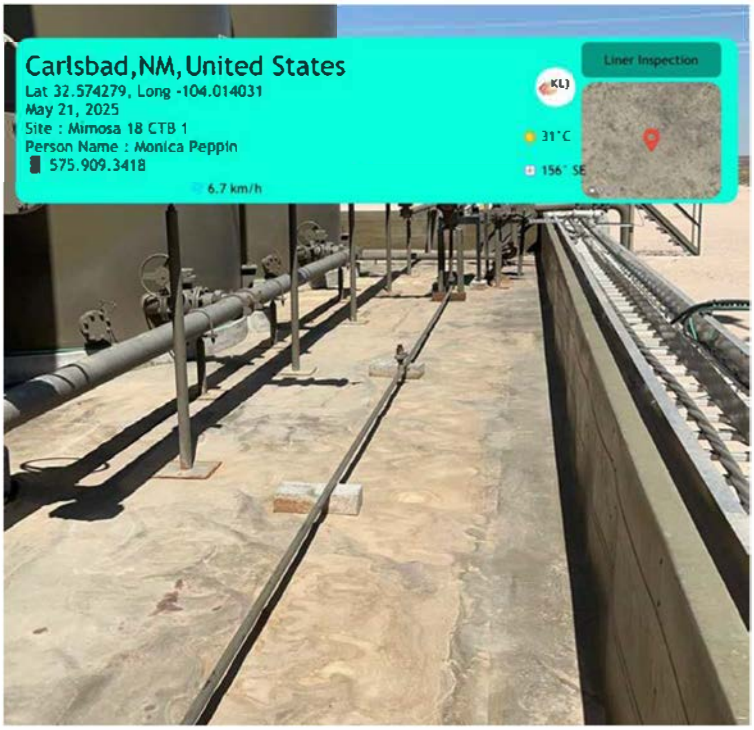
Liner between tanks on southeast side.



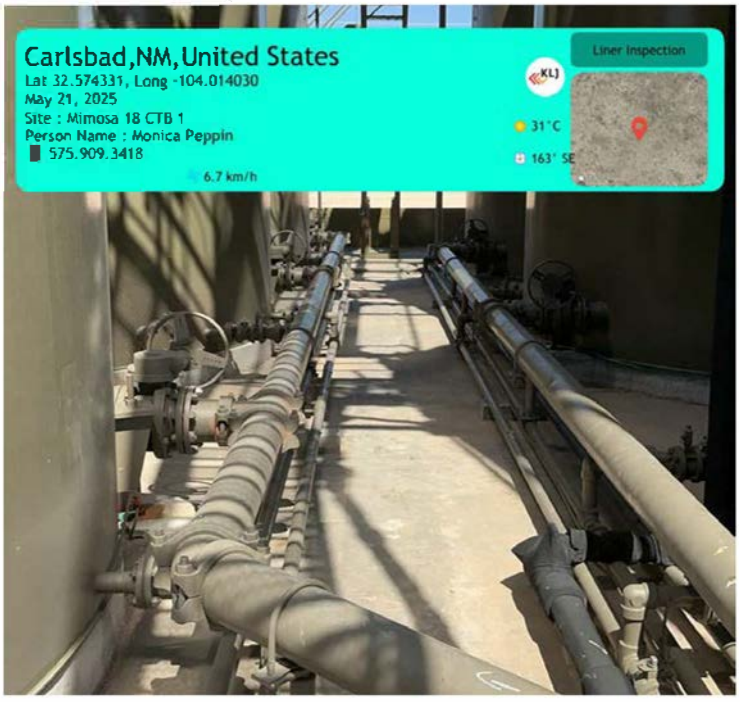
Middle area of liner between tanks.

Photolog

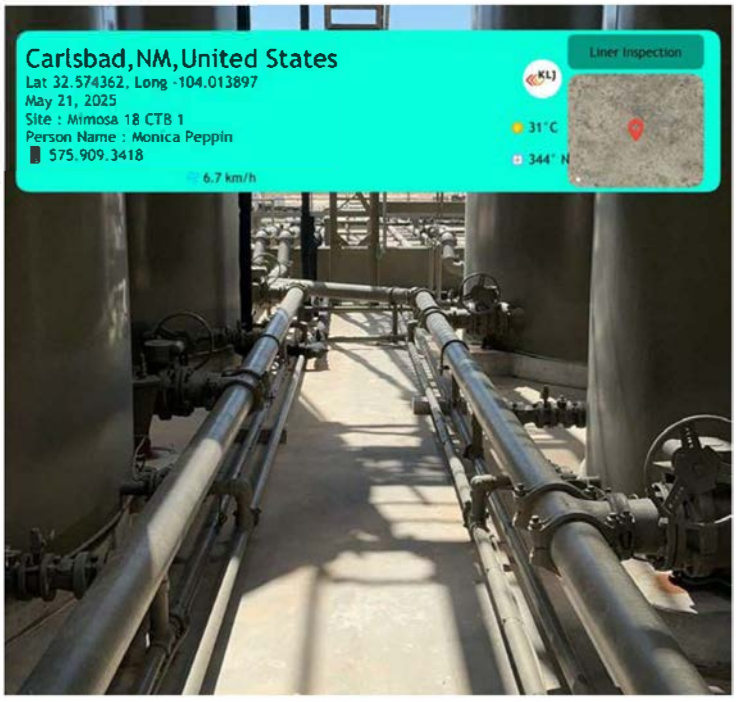
View of liner facing east from west wall.



View of south wall facing east.

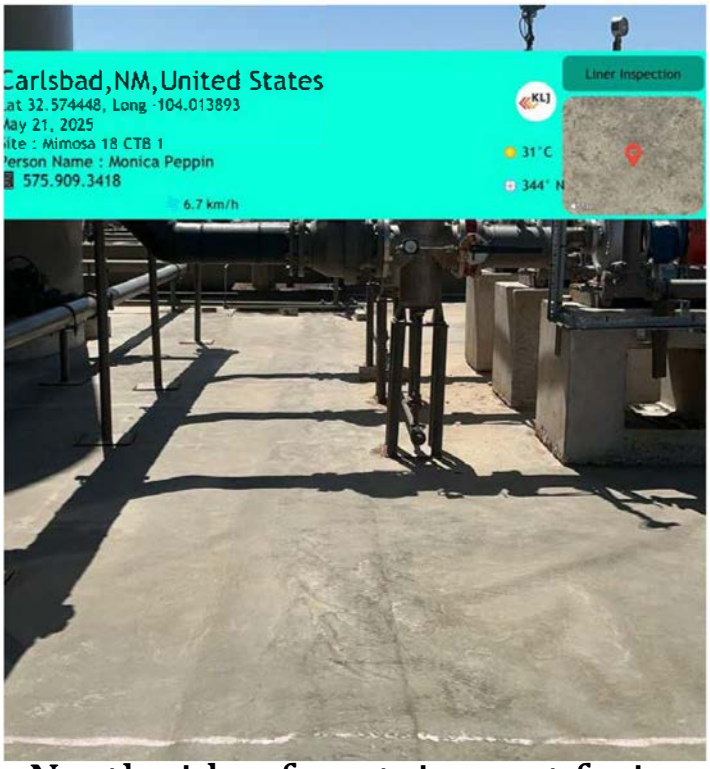


Liner between tanks facing east from west side.



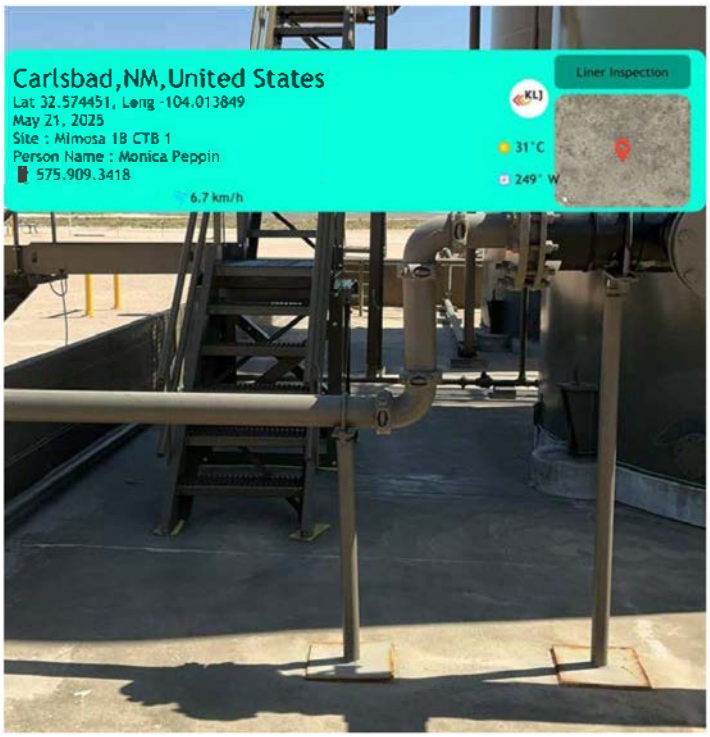
Liner between tanks facing west from east side.

Photolog

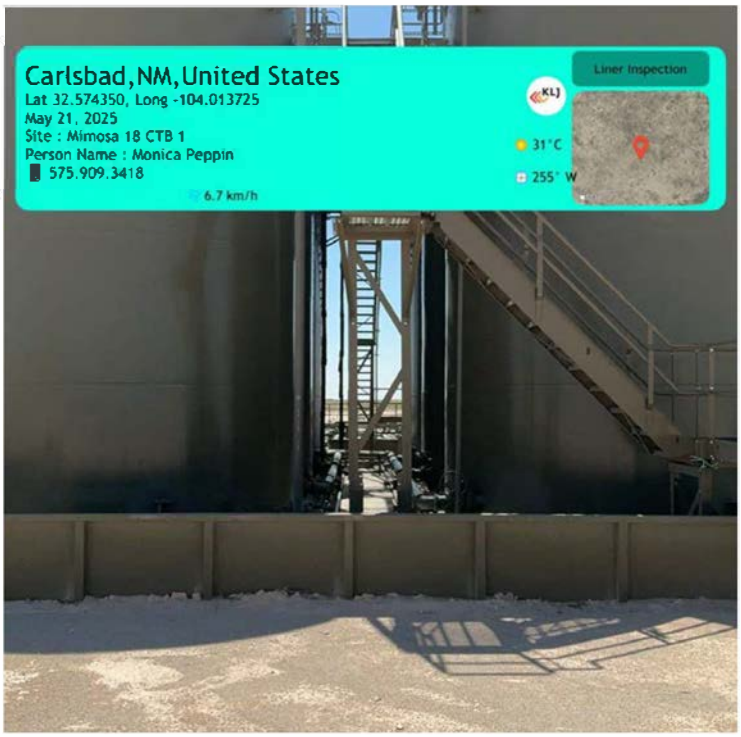


North side of containment facing west near transfer pumps.

Northeast corner of containment view.



Liner between tanks from south end facing north.



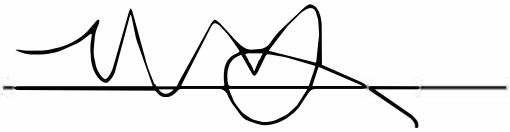
Liner from outside containment facing north.

Additional Notes & Recommendations

- Upload documents to folder
- Compile data and start drafting closure report
- Submit report for approval
- Liner integrity is confirmed. No signs of degrading or wear and tear of liner, photos taken as visual observation for reporting.
- Liner integrity has been confirmed with a visual inspection.

Acknowledgement & Signature

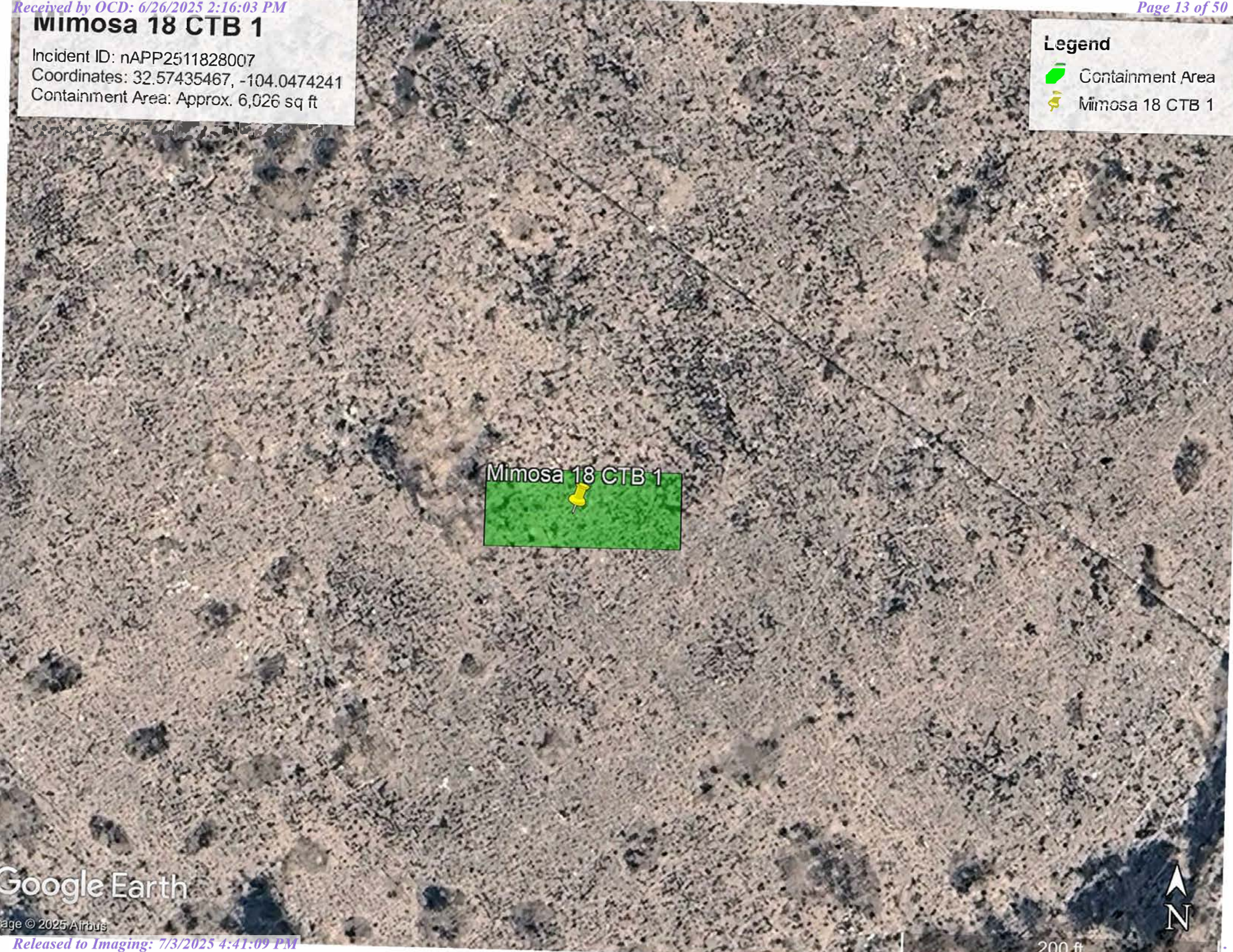
Technician: Monica Peppin **Date:** May 21, 2025

Signature: 

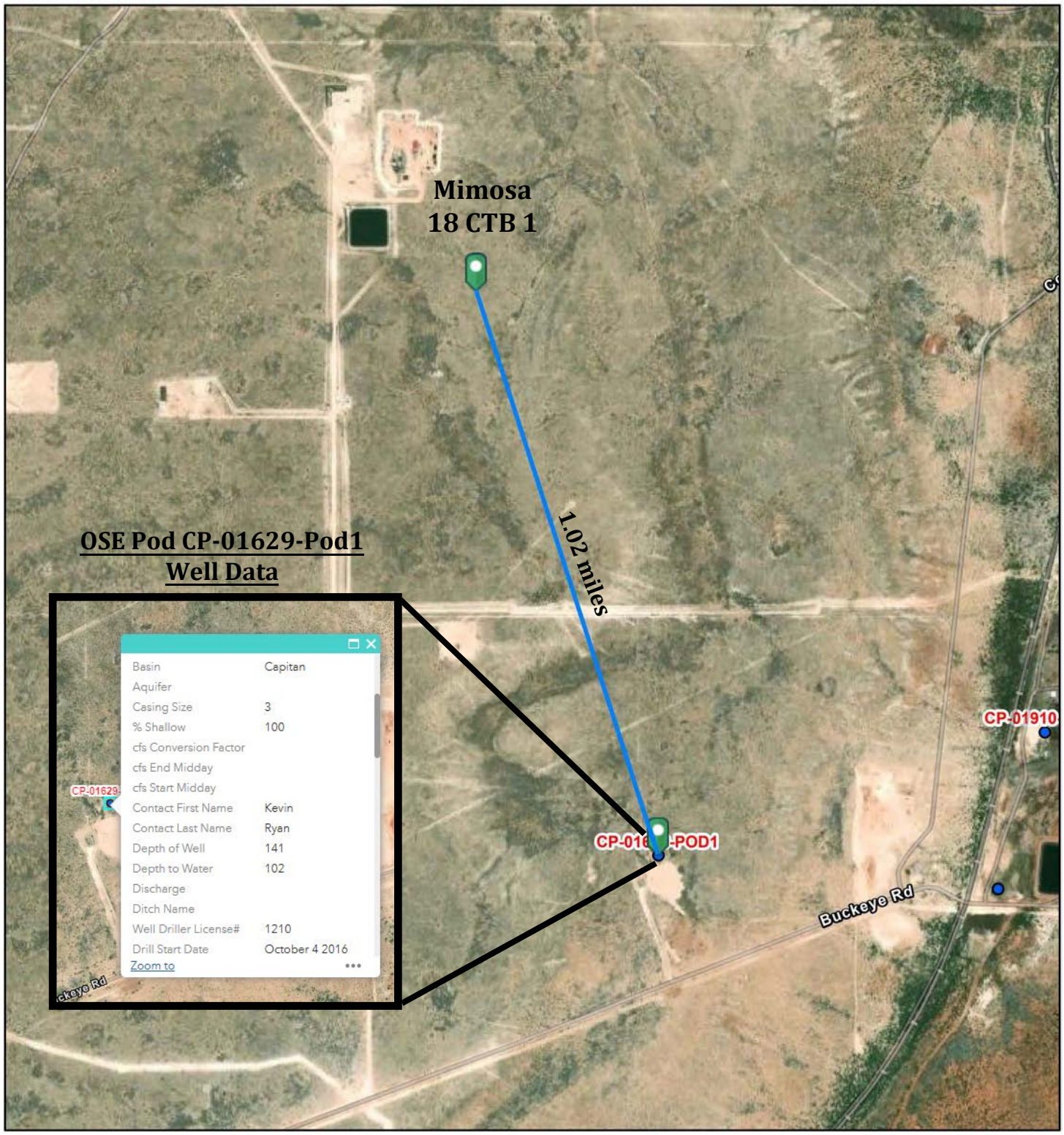
Departure Time: 12:16 PM

APPENDIX B

CLOSURE CRITERIA RESEARCH


Mimosa 18 CTB 1
Incident ID: nAPP2511828007
Coordinates: 32.57435467, -104.0474241
Containment Area: Approx. 6,026 sq ft
Legend
Containment Area
Mimosa 18 CTB 1
Mimosa 18 CTB 1
Google Earth
age © 2025 Airbus
N
200 ft

Mimosa 18 CTB 1 Nearest DTGW Proximity



OSE Pod CP-01629-Pod1 Well Data

5/19/2025, 8:40:53 AM

- Override 1

GIS WATERS PODs

- Active

Nearest OSE Pod
CP-1629-Pod1
Distance to Pod
1.02 miles
Pod Type
Monitor Well
DTGW
102 ft bgs

1:18,307
0 0.13 0.25 0.5 mi
0 0.2 0.4 0.8 km

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

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

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): EXPL-POD 1-Monitor	OSE FILE NUMBER(S): CP-1629
WELL OWNER NAME(S): Intrepid Potash - New Mexico LLC	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 707 17th Street, Suite 4200	CITY: Denver STATE: CO ZIP: 80202

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	33	36.8	N
LONGITUDE	104	00	31.4	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

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

SW4NEA, Sec19, T205, R30E Eddy County, NM

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1210	Bryan Nydoske	

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10-4-16	10-31-16	141	146	97

COMPLETED WELL IS: ○ ARTESIAN ○ DRY HOLE ◉ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): 102

DRILLING FLUID: ○ AIR ○ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ○ ROTARY ○ HAMMER ○ CABLE TOOL ◉ OTHER – SPECIFY: Casing Hammer

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	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	105	7 5/8	PVC Casing	PVC Flush Thread	2.864	0.3	
105	125	7 5/8	PVC Screen	PVC Flush Thread	2.864	0.3	.020
125	135	7 5/8	PVC Casing	PVC Flush Thread	2.864	0.3	

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
0	23	7 5/8	Portland Cement	47.5 Gal	triemed
23	84.3	7 5/8	High solids bentonite grout	132 Gal	Triemed
84.3	89.6	7 5/8	Bentonite Chips	2	Triemed
89.6	94.6	7 5/8	20/40 Sand	4	Triemed
94.6	141	7 5/8	8/12 Sand	25	Triemed
141	146	7 5/8	Bentonite Chips	2.5	Triemed

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1629	POD NUMBER	1	TRN NUMBER	593112
LOCATION	20S.30E.19.2.3.4			monitoring	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	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	19	19	See Attached	○ Y ◉ N	
19	93	74	See Attached	○ Y ◉ N	
93	96	3	See Attached	○ Y ◉ N	
96	110	14	See Attached	◉ Y ○ N	1-2
110	120	10	See Attached	◉ Y ○ N	3
120	128	8	See Attached	◉ Y ○ N	50
128	146	18	See Attached	◉ Y ○ N	?
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
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				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ◉ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 50

STATE ENGINEER OFFICE ROSWELL, NEW MEXICO 2016 DEC 13 PM 2:03

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:

NA

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

Mark Green

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 20 DAYS AFTER COMPLETION OF WELL DRILLING:

Bryan Nydoske — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

11/30/16 — DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1629	POD NUMBER	1	TRN NUMBER	593112
LOCATION	20S.30E.19.2.3.4			monitoring	PAGE 2 OF 2

Feet BGS	LITHOLOGY
0-19	Weathered Caliche, pink to tan. Strong effervescence with 10% HCl.
19-93	Dark Red siltstones with interbedded claystones of varying thickness. Clay percentage varies in matrix. Interbedded claystones highly indurated and waxy. Selenite crystals at top, decreasing with depth.
93-96	Dark Claystone. Well-Indurated. Damp at base. No flow.
96-110	Siliceous gravel, poorly sorted from coarse sandstone to 1.5 inch gravel. Very fine sandstone and claystone in matrix. Clasts of dark red shale with green reduction spots also present.Water starting to come in very slow at 97 (1-2 gpm at most).
110-115	Water estimated up to ~3 gpm max at 110. Clean fine grained brick red sandstone with minimal to zero gravel
115-120	Well indurated light red mudstone and anhydrite. Limey. Water still estimated max ~3 gpm
120-128	Vuggy dark red dolomite. Water estimated at up to ~50 gpm
128-146	White anhydrite. Massive.
	Original TD listed as 140. Subs added after tripping out. Depths subject to 6 foot shift beginning after last joint of driven casing.

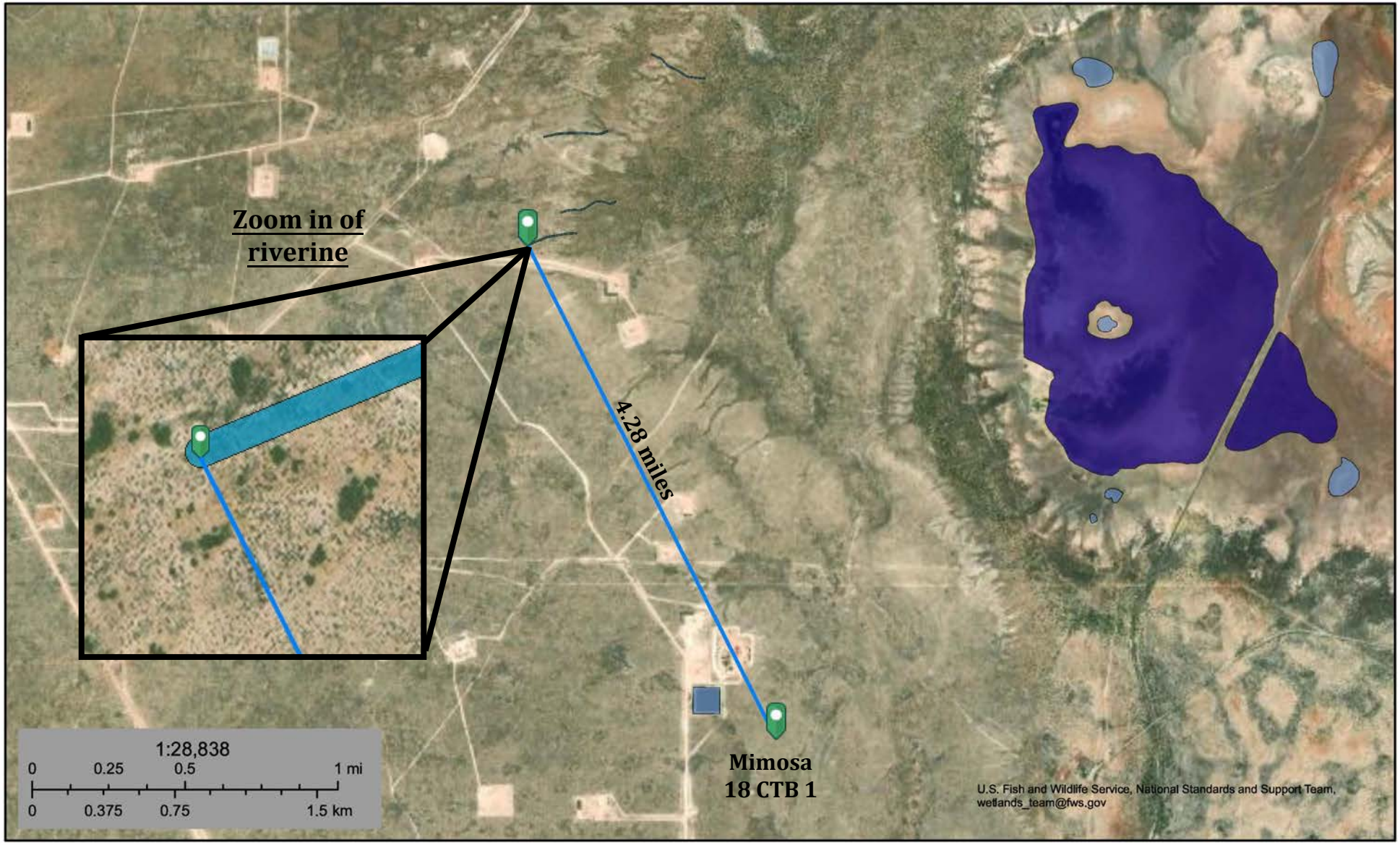
WELL CONSTRUCTION (from bottom up)

146-141	146 below ground surface (bgs) backfilled with 3 sacks bentonite chips
141-94.6	8x12 Silica Sand in Annulus
135-125	10 foot x 3 inch Sch80 PVC, flush thread blank set at 135 bgs (sounded by pump installer at 139 below top of casing). Cap screwed on bottom.
125-105	20 foot x 3 inch Sch80 PVC, 0.020 machine slot screen with flush threads
94.6-89.6	20x40 Silica Sand in Annulus
89.6-84.3	Bentonite Chips
84.3-23	Bentonite Grout
23-0	Portland Cement
105 bgs to ~2.5 ags	3 inch Sch80 PVC, flush thread solid casing
	Concrete pad 4 feet x 4 feet x 6 inches set at leveled surface, and pitched away from wellhead.
	Steel slip casing with locking aluminum cap set in concrete pad to 6 inches above top of PVC casing. Painted safety yellow.
	Pea gravel installed between slip casing and PVC well casing. Locking J-plug installed into PVC casing

U.S. Fish and Wildlife Service
National Wetlands Inventory

Mimosa 18 CTB 1

Nearest Significant Watercourse: Riverine
Distance: 4.28 miles



May 12, 2025

Wetlands

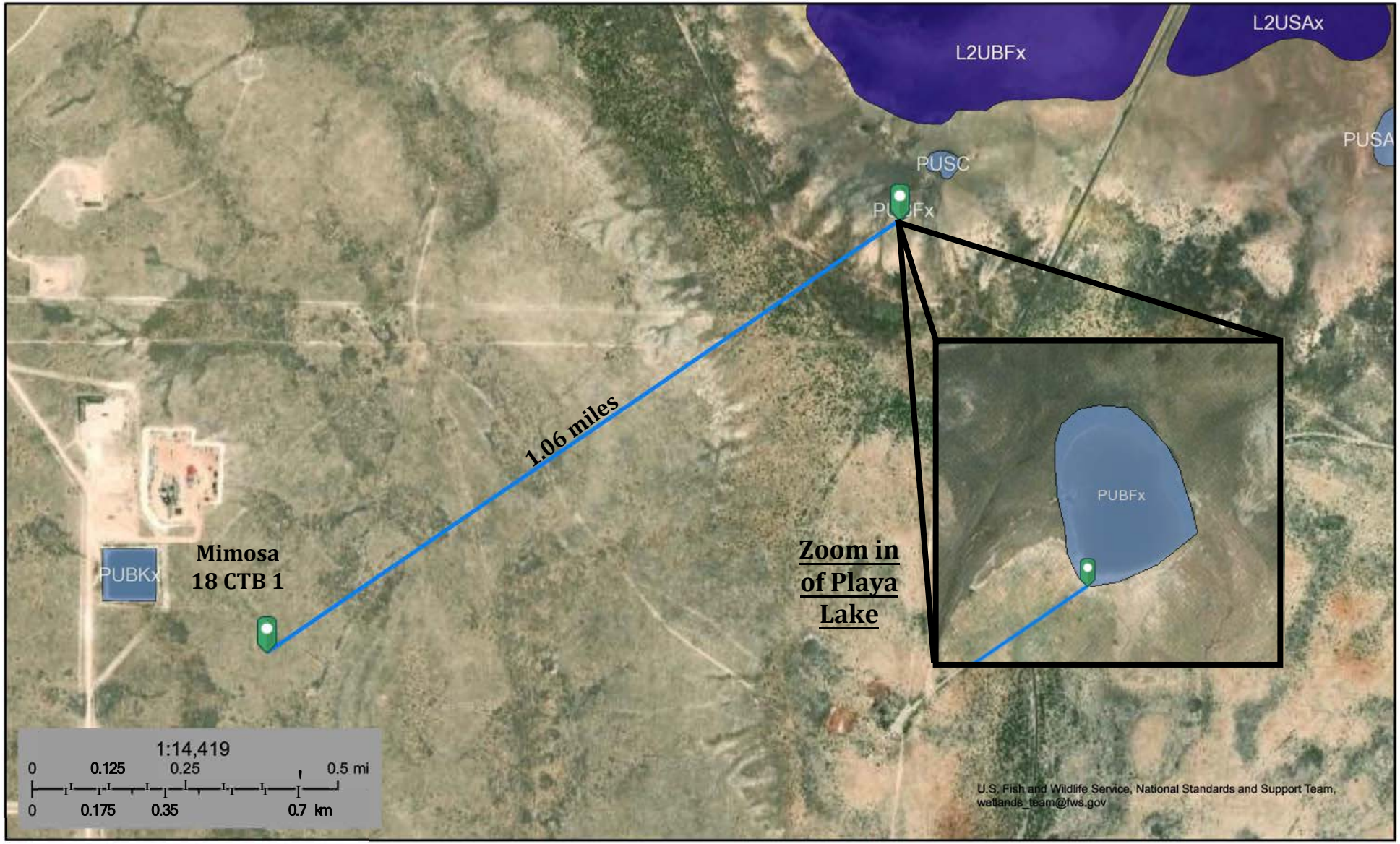
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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

U.S. Fish and Wildlife Service
National Wetlands Inventory

Mimosa 18 CTB 1

Playa Lake Distance: 1.06 miles



May 12, 2025

Wetlands

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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.

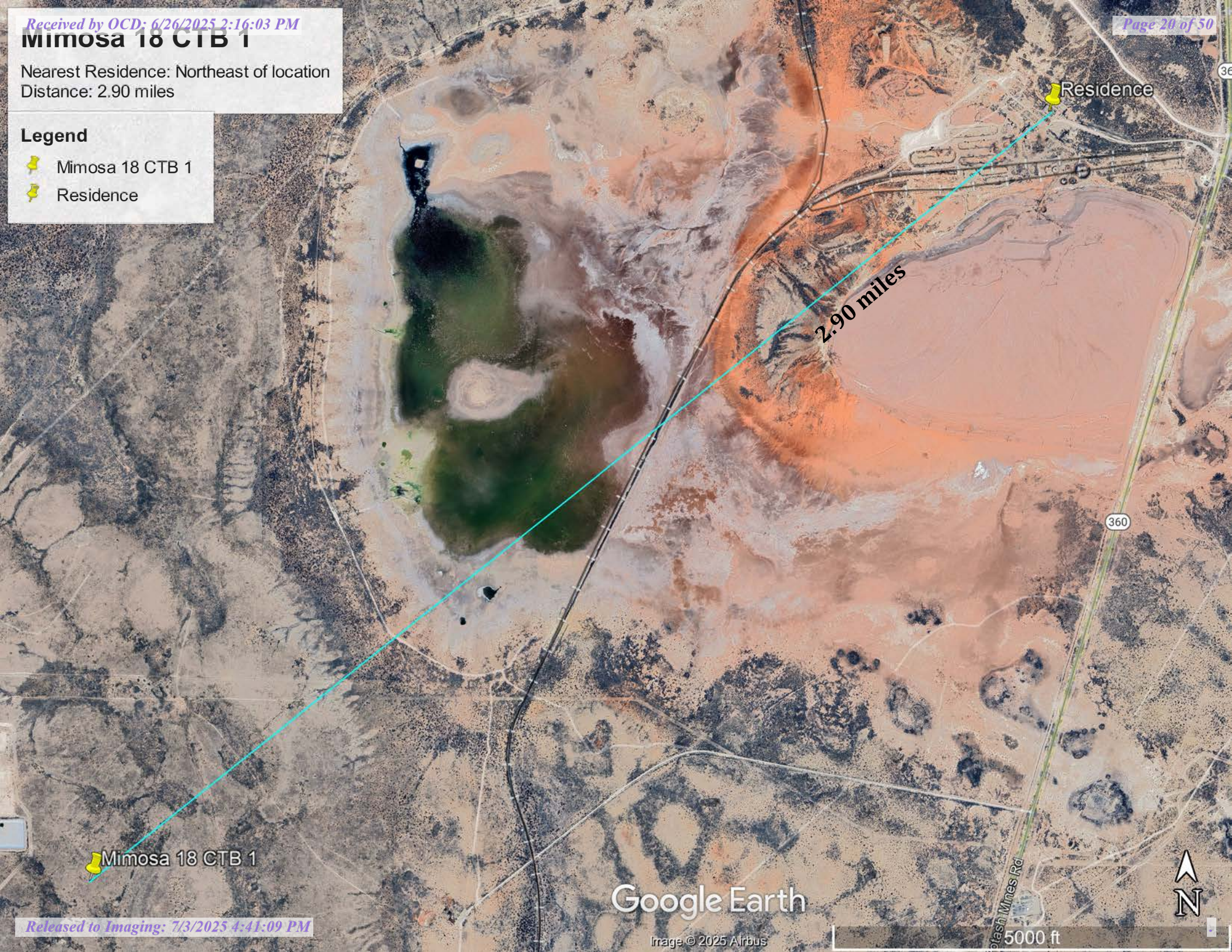
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Mimosa 18 CTB 1

Nearest Residence: Northeast of location
Distance: 2.90 miles

Legend

- Mimosa 18 CTB 1
- Residence



Revised May 1993

IMPORTANT — READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM.

Declaration of Owner of Underground Water Right

CAPITAN
BASIN NAME

Declaration No. CP-832 Date received November 12, 1993

STATEMENT

1. Name of Declarant Snyder Ranches
Mailing Address PO Box 2158 Hobbs 88240
County of Lea, State of N. Mex.
2. Source of water supply SW aquifer (artesian or shallow water aquifer)
3. Describe well location under one of the following subheadings: de pump well
a. NE ¼ SW ¼ ¼ of Sec. 12 Twp. 20 Rge. 29 N.M.P.M., in
b. Tract No. of Map No. of the
c. X = fee, Y = feet, N.M. Coordinate System Zone
in the Grant.
On land owned by U.S.
4. Description of well: date drilled 1957 driller W.L. Van Noy depth 200 feet.
outside diameter of casing 7" inches; original capacity 50 gal. per min.; present capacity 50 gal. per min.; pumping lift UNK feet; static water level UNK feet (above) (below) land surface;
make and type of pump 2Hp sub. pump.
make, type, horsepower, etc., of power plant
Fractional or percentage interest claimed in well 100 %
5. Quantity of water appropriated and beneficially used 3 (acre feet per acre) 3 (acre feet per annum)
for livestock WATER purposes.
6. Acreage actually irrigated NONE acres, located and described as follows (describe only lands actually irrigated):

Subdivision	Sec.	Twp.	Range	Acres Irrigated	Owner

(Note: location of well and acreage actually irrigated must be shown on plat on reverse side.)

7. Water was first applied to beneficial use 1957 (month / day / year) and since that time has been used fully and continuously on all of the above described lands or for the above described purposes except as follows: continuous use for livestock

8. Additional statements or explanations

POD Renumbered
From: CP-832
To: CP-832 POD 1

I, HARRY C SQUIRES being first duly sworn upon my oath, depose and say that the above is a full and complete statement prepared in accordance with the instructions on the reverse side of this form and submitted in evidence of ownership of a valid underground water right, that I have carefully read each and all of the items contained therein and that the same are true to the best of my knowledge and belief.

Snyder Ranches, declarant.
by:

Subscribed and sworn to before me this 1st day of November, A.D. 19 93
My commission expires 8-24-94 Brad Cantleman Notary Public

FILED
NEW MEXICO LAW A DECLARATION IS ONLY A STATEMENT OF DECLARANT'S CLAIM.
ACCEPTANCE FOR FILING DOES NOT CONSTITUTE APPROVAL OR REJECTION OF THE CLAIM.

SS0659

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

ELUID MARTINEZ
STATE ENGINEER

ROSWELL

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
(505) 622-6521

November 17, 1993

Files: CP-818 thru CP-834

Mr. Larry C. Squires
Snyder Ranches
P O Box 2158
Hobbs, New Mexico 88240

Dear Mr. Squires:

Enclosed are your copies of Declarations of Owner of Underground Water Right Nos. CP-818 thru CP-834 which have been filed for record in the office of the State Engineer.

Please refer to these numbers in all future correspondence concerning these declarations.

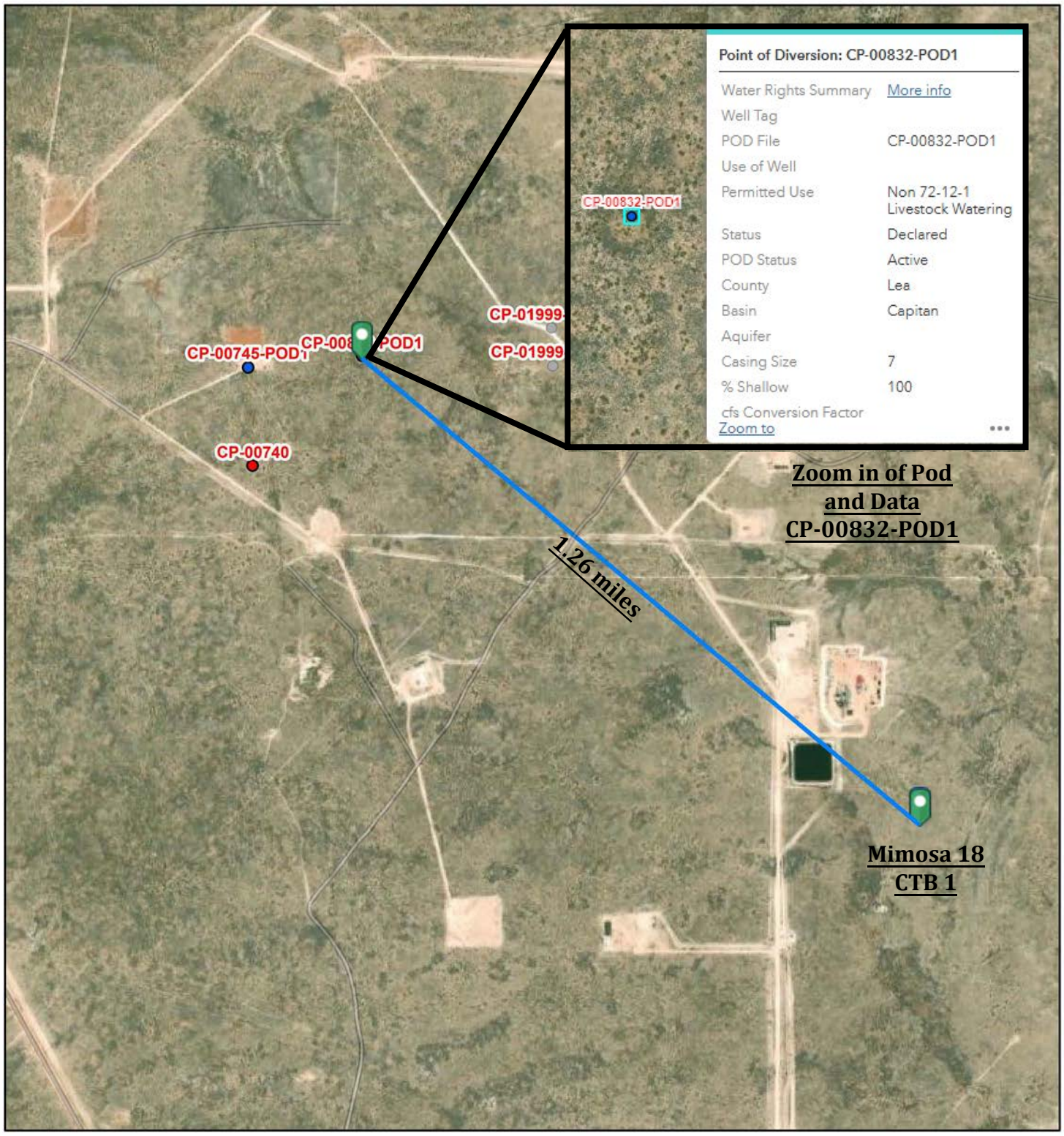
The filing of these declarations does not indicate affirmation or rejection of the statements contained therein.

Yours very truly,

Johnny Hernandez, Supervisor
Capitan Water Basin

JR:pks
cc: Santa Fe

Mimosa 18 CTB 1 Distance to Livestock Water



5/11/2025, 3:54:55 PM

1:18,307

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Override 1

GIS WATERS PODs

Active

Plugged

Distance to Nearest Domestic Well/Livestock Watering Pod 1.26 miles

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

Monica Peppin

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

Mimosa 18 CTB

Nearest Municipal Boundary: Carlsbad, NM
Distance: 10.28 miles

Legend

- Distance to Municipal Boundary
- Mimosa 18 CTB 1

Mimosa 18 CTB 1

10.26 miles

Zoom in of municipal boundary distance

Google Earth

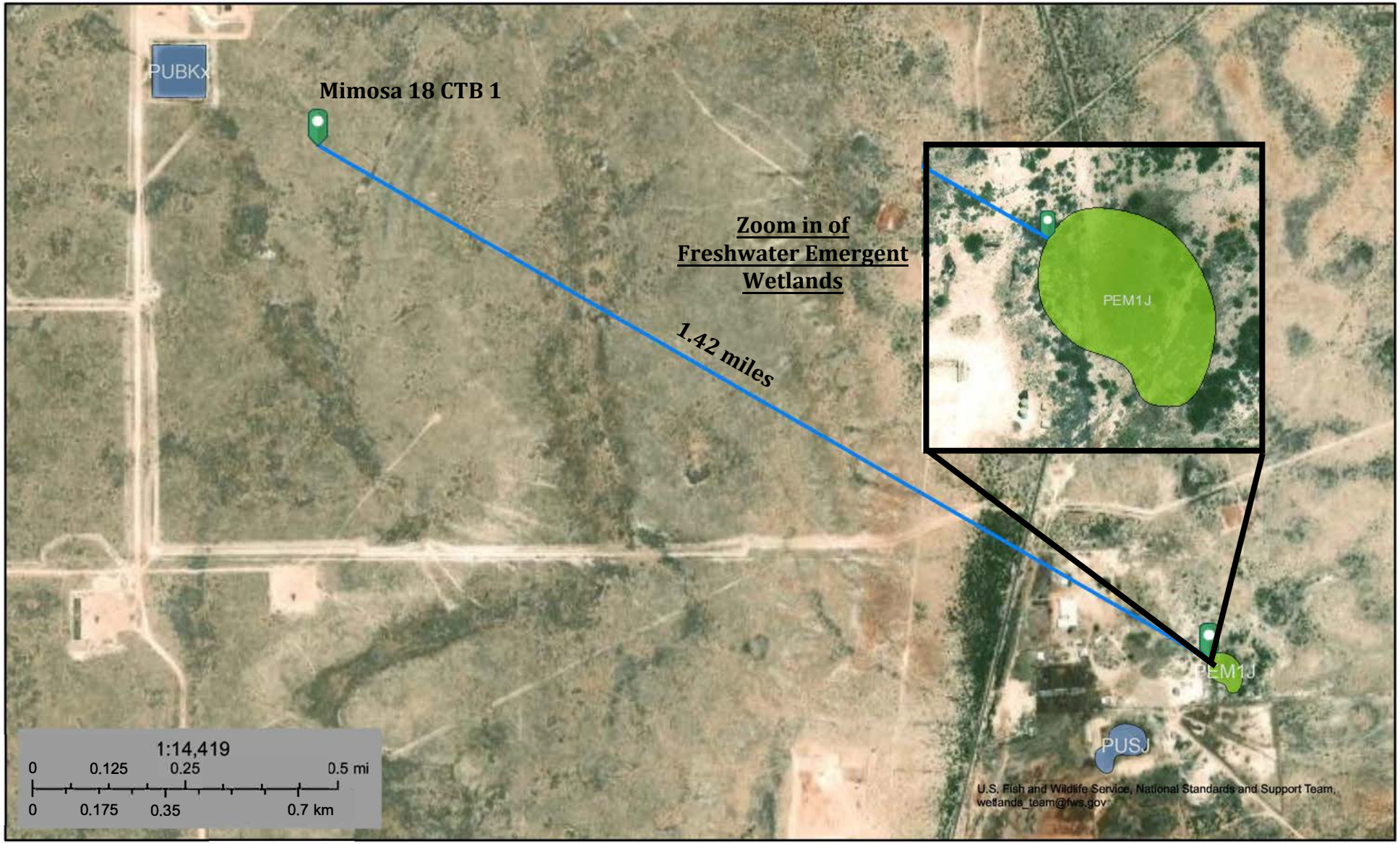
4 mi

N

U.S. Fish and Wildlife Service
National Wetlands Inventory

Mimosa 18 CTB 1

Nearest Wetland: Freshwater Emergent Wetland
Distance: 1.42 miles



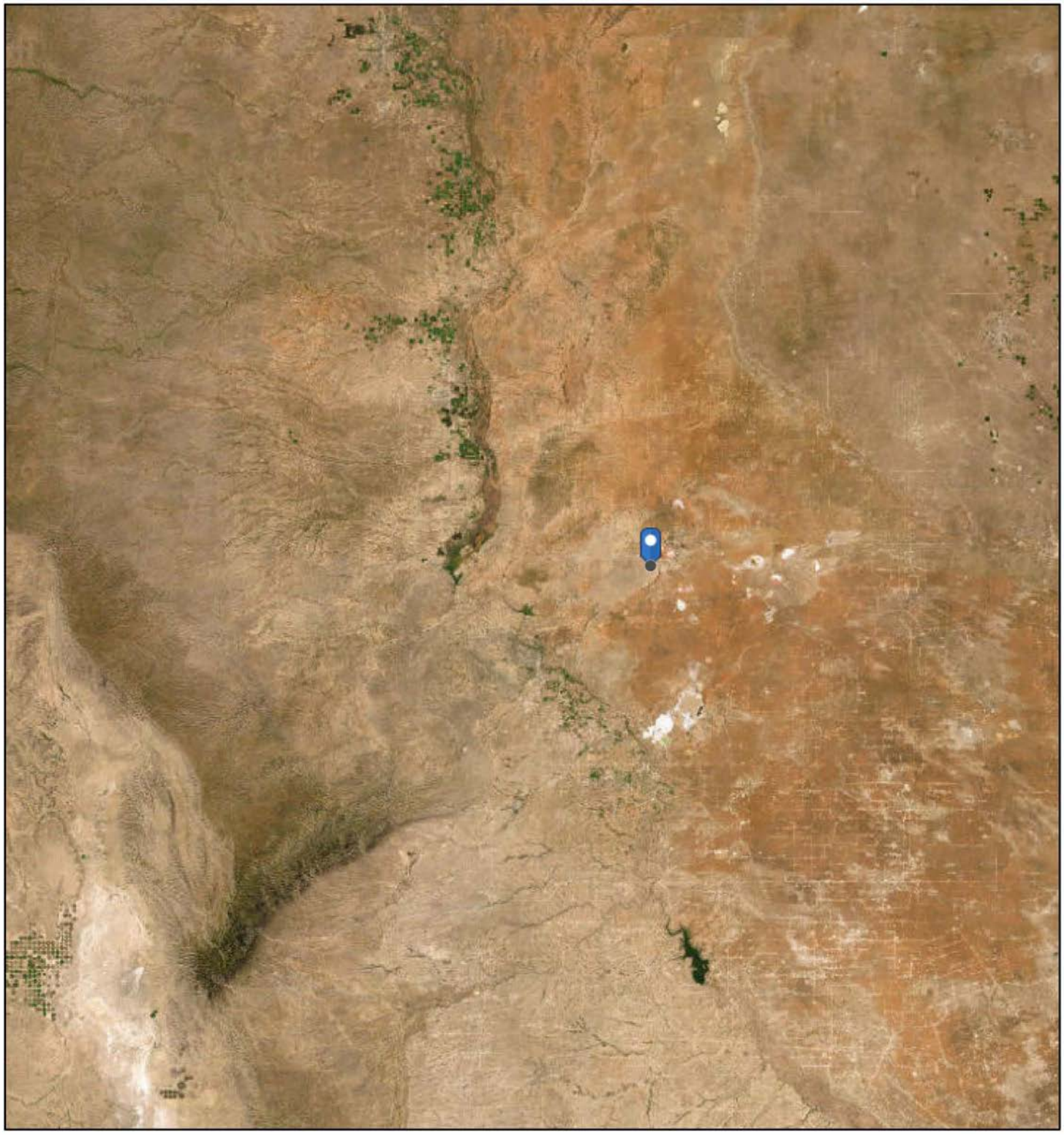
May 12, 2025

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.

Mimosa 18 CTB 1 Geological and Subsurface Mines



5/12/2025, 11:46:55 AM

1:1,175,646

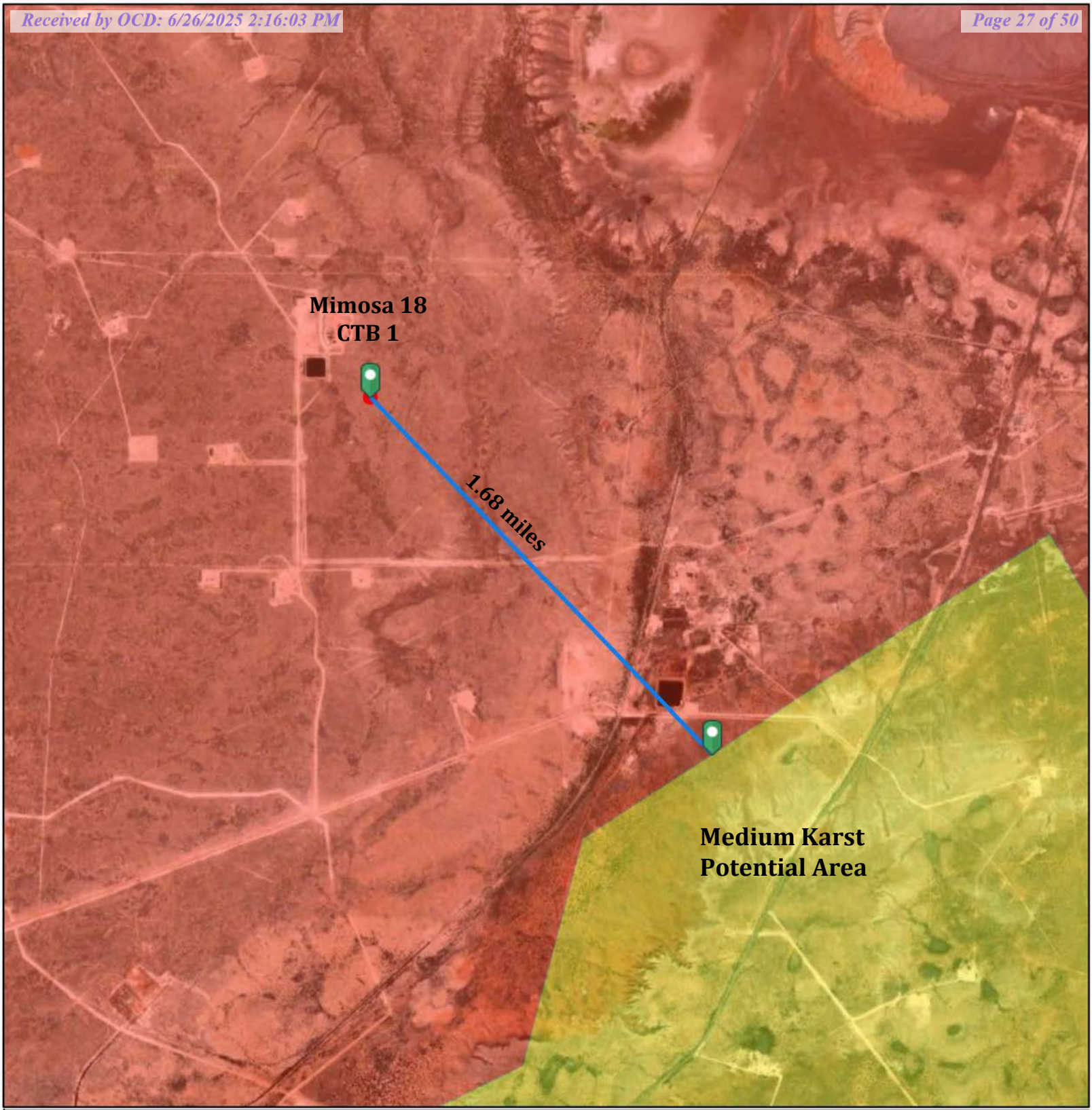
0 5 10 20 mi

0 12.5 25 50 km

Mining_Ghost_Towns

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

Monica Peppin



Mimosa 18 CTB 1 Karst Potential

0 0.17 0.35 0.7 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: 5/12/2025

User drawn points

Karst_Potential_NM

Potential

- Critical
- High
- Medium

National Flood Hazard Layer FIRMette

FEMA

104°1'10"W 32°34'54"N

104°0'32"W 32°34'24"N

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

1:6,000

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

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

N

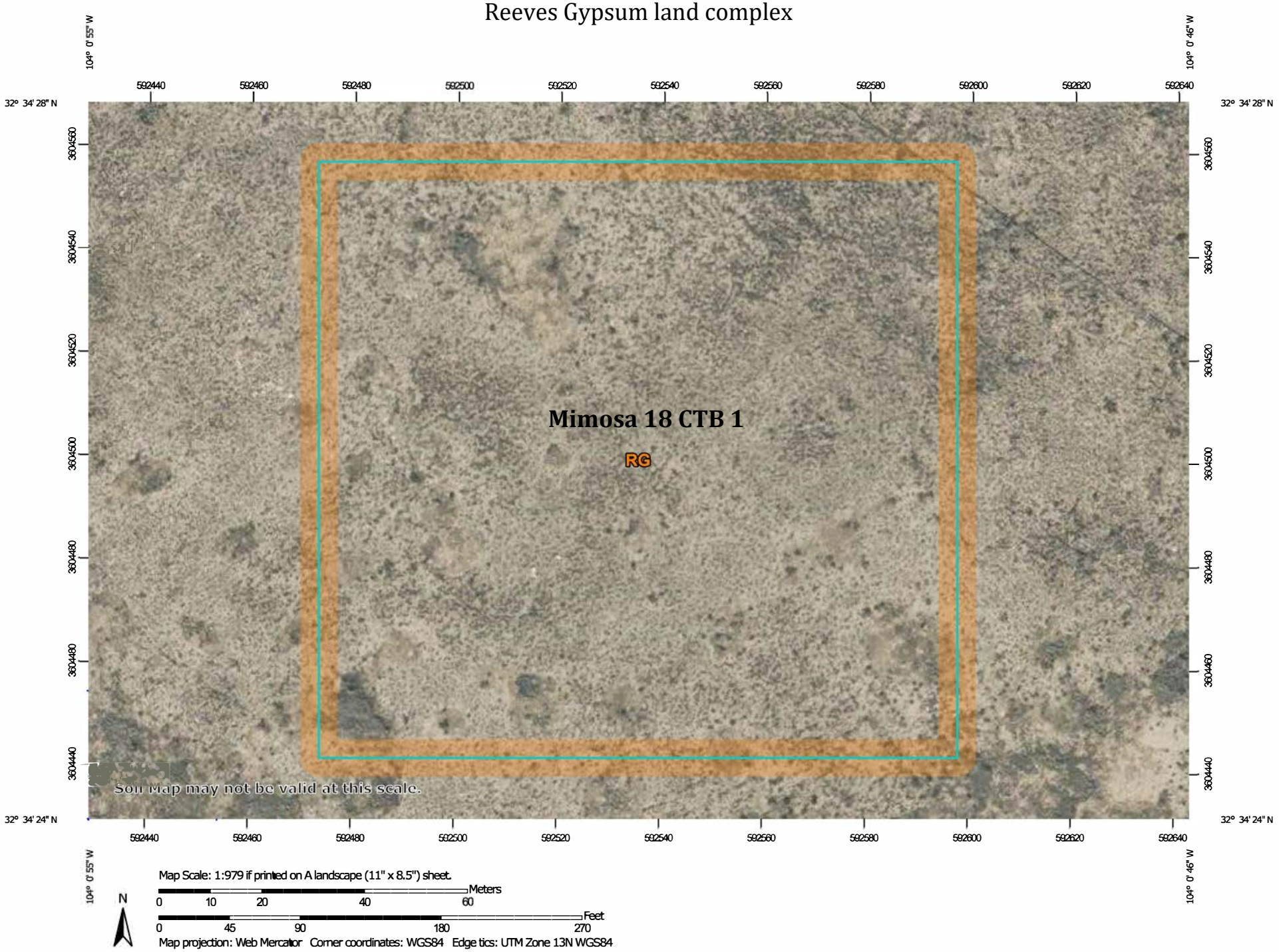
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/18/2025 at 11:01 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-Eddy Area, New Mexico (Mimosa 18 CTB 1)
Reeves Gypsum land complex



Soil Map—Eddy Area, New Mexico
(Mimosa 18 CTB 1)

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 20, 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: Nov 12, 2022—Dec 2, 2022

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
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	3.6	100.0%
Totals for Area of Interest		**3.6**	**100.0%**

Eddy Area, New Mexico

RG—Reeves-Gypsum land complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5f
Elevation: 1,250 to 5,000 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 190 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Reeves and similar soils: 55 percent
Gypsum land: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reeves

Setting

Landform: Ridges, plains, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 32 inches: clay loam
H3 - 32 to 60 inches: gypsiferous material

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Gypsum, maximum content: 80 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Description of Gypsum Land

Setting

Landform: Ridges, plains, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Largo

Percent of map unit: 5 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Reagan

Percent of map unit: 5 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Cottonwood

Percent of map unit: 5 percent
Ecological site: R070BC033NM - Salty Bottomland
Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 20, Sep 3, 2024

USDA Natural Resources Conservation Service

Ecological site R070BC007NM
Loamy

Accessed: 06/13/2025

General information

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

Figure 1. Mapped extent

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

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on uplands landforms, mainly on hill slopes, ridges, plains, terraces and some fan remnants. Slopes range from 1 to 5 percent and average about 3 percent. Average annual precipitation is about 8 to 14 inches. Elevations range from 2,842 to 5,000 feet.

Table 2. Representative physiographic features

Landforms	(1) Plain (2) Terrace (3) Fan piedmont
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–5,000 ft
Slope	5%
Aspect	E, S, W

Climatic features

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

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

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

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 in January through June rapidly drying out the soil during a critical time for cool season plant growth.

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

Table 3. Representative climatic features

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

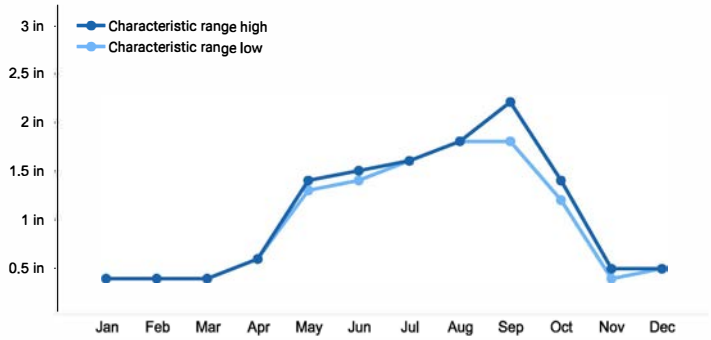


Figure 2. Monthly precipitation range

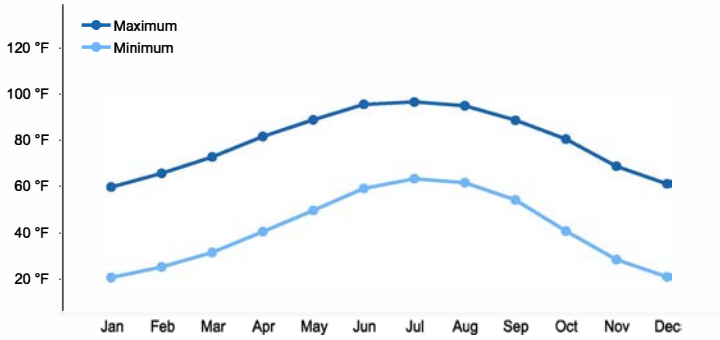


Figure 3. Monthly average minimum and maximum temperature

Influencing water features

This site is not influenced by wetland or streams.

Soil features

The soils of this site are deep to moderately deep. The moderately deep soils have either a petrocalcic, petrogypsic or gypsum horizon between 30 and 40 inches.

Surface textures are loam, silt loam, very fine sandy loam, or clay loam. Substratum textures are loam, silty clay loam, clay loam, or silt loams. Subsoil textures are silt loam , clay loam silty clay loam, gravelly loam, gravelly clay loam or very gravelly loam. Permeability is moderate to slow and the available water holding capacity is high to moderate. The Atoka, Reeves, Russler, Milner soils may have highr amounts of CaC03, ranging as high as 40 percent in the subsoil. Rock fragments range fro 5 to 50 percent in the subsoil. Reeves, Rusler, Milner, Holloman soils will have 40 to 80 percent gypsum in the underlying material.

Maximum and minimum values listed below represent the characteristic soils for this site.

Characteristic Soils:

Atoka (petrocalcic)
Bigetty
Reagan
Reakor
Reeves (gypsum)
Russler (gypsum)
Largo
Russler (gypsum)
Largo
Berino
Tinney
Midessa
Ratliff
Holloman (gypsum)
Milner (gypsum)

Table 4. Representative soil features

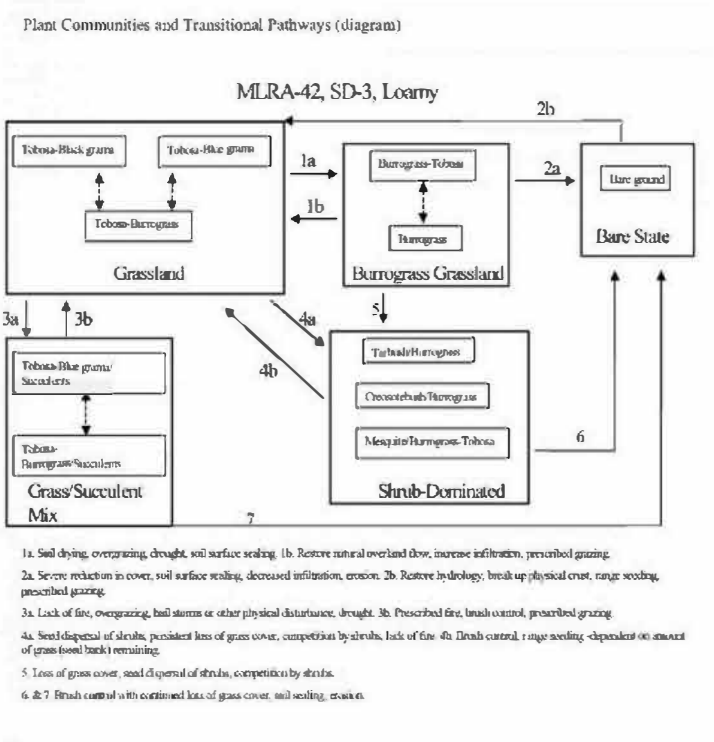
Surface texture	(1) Loam (2) Very fine sandy loam (3) Silt loam
Family particle size	(1) Loamy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to slow
Soil depth	30–72 in
Surface fragment cover <=3"	5%
Surface fragment cover >3"	Not specified
Available water capacity (0-40in)	5–12 in
Calcium carbonate equivalent (0-40in)	10%
Electrical conductivity (0-40in)	8 mmhos/cm
Sodium adsorption ratio (0-40in)	6
Soil reaction (1:1 water) (0-40in)	6.6–8.4
Subsurface fragment volume <=3" (Depth not specified)	5%
Subsurface fragment volume >3" (Depth not specified)	Not specified

Ecological dynamics

Overview: The Loamy site is associated with the Gyp Upland ecological site with which it intergrades. There is a pronounced increase in alkali sacaton along this interface. The loamy site is also associated with the Gravelly and Shallow ecological sites from which it receives run-on water. The Draw site often dissects Loamy sites and is distinguished from the Loamy site by increased production or greater densities of woody species. The historic plant community has a grassland aspect, dominated by grasses with

shrubs and half-shrubs sparse and evenly distributed. Tobosa, black grama and blue grama are the dominant species. Retrogression within this state is characterized by a decrease in black and blue grama and an increase in burrograss. Continuous overgrazing and drought can initiate a transition to a Burrograss-Grassland state. Continued reduction in grass cover and resulting infiltration problems may eventually effect a change to a Bare State, with very little or no remaining grass cover. Alternatively, creosotebush, tarbush or mesquite may expand or invade. Transitions back to a Grassland State from a Bare or Shrub-Dominated state are costly and may not be economically feasible. Decreased fire frequency may play a part in the transition to the Grass/Succulent Mix state with increased amounts of cholla and prickly pear.

State and transition model



State 1
Historic Climax Plant Community

Community 1.1
Historic Climax Plant Community

State Containing Historic Climax Plant Community Grassland: The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs sparse and evenly distributed. Black grama, blue grama, and tobosa are the dominant grass species. There are a variety of perennial forbs and their production varies widely by season and year. Globemallow, verbena, groundsels, croton and filaree are forbs commonly found on this site. Fourwing saltbush and winterfat are two of the more palatable shrubs. The Loamy ecological site encompasses a wide variety of soils, with surface textures ranging from sandy loams to clay loams. Soil depths range from shallow to very deep and can include sub surface features such as calcic, petrocalcic, and gypsic horizons. These variations cause differences in plant community composition and dynamics. Black grama is found at highest densities on coarser textured sandy loams, with blue grama preferring finer textured loam and silt loam, and tobosa favoring lower landscape positions and loam to clay loam surface textures. Burrograss may often be the dominant grass species on silty soils, perhaps in part due to the seedlings ability to auger into and establish on physically crusted soils. Gypsum influenced soils typically have greater amounts of tobosa, burrograss, and ephedra. There is greater representation of sideoats and vine mesquite within the tobosa-blue grama community. Retrogression under continuous heavy grazing results in a decrease of black grama, blue grama, sideoats grama, plains bristlegrass, bush muhly, cane bluestem, vine mesquite, winterfat, and fourwing saltbush. Species such as burrograss, threeawns, sand dropseed, sand muhly, and broom snakeweed increase under continuous heavy grazing or prolonged periods of drought. Under continued retrogression burrograss can completely dominate the site. Creosotebush, tarbush, and mesquite, can also dominate. Cholla and prickly pear can increase on areas that are disturbed or overgrazed. Diagnosis: Tobosa, black grama, and blue grama are the dominant species. Grass cover is uniformly distributed with few large bare areas. Shrubs are sparse and evenly distributed. Slopes range from level to gently sloping and usually display limited evidence of active rills and gully formation if plant cover remains intact. Litter movement associated with overland flow is limited to smaller size class litter and short distances. Other shrubs include: yucca, mesquite, tarbush, cholla and creosote bush. Other forbs include: desert holly, scorpionweed, bladderpod, flax, nama, fleabane, Indianwheat, Indian blanket flower, groundcherry, deerstongue, and rayless goldenrod.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	585	833	1080
Forb	39	55	72
Shrub/Vine	26	37	48
Total	**650**	**925**	**1200**

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	15-30%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	25-30%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%

Bare ground	40-50%

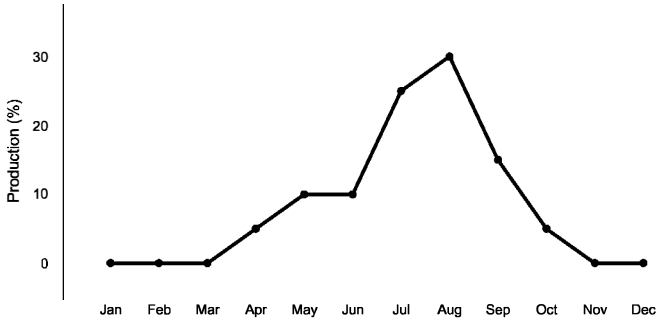


Figure 5. Plant community growth curve (percent production by month). NM2807, R042XC007NM Loamy HCPC. R042XC007NM Loamy HCPC Warm Season Plant Community..

State 2
Burrograss-Grassland

Community 2.1
Burrograss-Grassland

Burrograss-Grassland: Changes in hydrology resulting in decreased available soil moisture, reduces grass cover and increases bare ground. Burrograss is the dominant grass. Tobosa cover is variable and can range from sizeable areas to small patches occupying only depressions or the lowest and wettest positions within the site. Threeawns, ear muhly, sand muhly, and fluffgrass occur at increased densities compared to the grassland state. Shrub densities may increase especially mesquite, creosotebush or tarbush. Retrogression within this state is characterized by a further decrease in grass cover and increased bare ground. Further deterioration of this site can result in the transition to a bare state or becoming shrub dominated. Diagnosis: Burrograss is the dominant species. Grass cover is no longer uniformly distributed, instead tending to be patchy with large areas of bare ground present. Physical crusts are present in bare areas reducing infiltration and suppressing seedling establishment by any grass species other than burrograss. Transition to Burrograss-Grassland (1a): Transitions from grassland to a burrograss-grassland state may occur due to changes in hydrology. Gullies, roads or obstructions that alter natural water flow patterns may cause this transition. Changes in surface hydrology may also occur due to overgrazing or drought. The reduction in grass cover promotes increased soil physical crusts and reduces infiltration. 5 Key indicators of approach to transition: ? Diversion of overland flow resulting in decreased soil moisture. ? Increase in amount of burrograss cover ? Reduction in grass cover and increase in size and frequency of bare patches. ? Formation of physical crusts—indicating reduced infiltration. ? Evidence of litter movement—indicating loss or redistribution of organic matter. Transition back to Grassland (1b) The natural hydrology of the site must be returned. Culverts, turnouts, or rerouting roads may help re-establish natural overland flow, if roads or trails have altered the hydrology. Erosion control structures or shaping and filling gullies may help regain natural flow patterns and establish vegetation if the flow has been channeled. Breaking up physical crusts by soil disturbance may promote infiltration and seedling emergence. Allow natural revegetation to take place. Prescribed grazing will help ensure proper forage utilization and reduce grass loss due to grazing.

State 3
Bare State

Community 3.1
Bare State

Bare State: Extremely low ground cover, soil degradation and erosion characterize this state. Very little vegetation remains. Burrograss is the dominant grass and cover is extremely patchy. Physical soil crusts are extensive. Erosion and resource depletion increase as site degrades. Diagnosis: Very little cover remains. Erosion is evident by soil sealing, water flow patterns, pedestals or terracettes. Rills and gullies may be present and active. Transition to Bare State (2a): Extended drought, continuous heavy grazing, or other disturbance that severely depletes grass cover can effect this transition. As grass cover decreases, sheet flow and erosion increase, and physical soil crusts form, thereby further reducing infiltration. Key indicators of approach to transition: ? Continued reduction in grass cover. ? Increased soil surface sealing. ? Increased erosion. ? Reduced aggregate stability in bare areas. Transition back to Grassland (2b) Restore the hydrology, see (1a). With the extent of grass loss range seeding may be necessary. Utilizing livestock or mechanical means to break up the physical crusts may increase infiltration and aid seedling establishment. Prescribed grazing will help ensure adequate deferment period following seeding, and proper forage utilization once the grass stand is well established. The degree to which this site is capable of recovery depends on the restoration of hydrology, extent of degradation to soil resources, and adequate rainfall necessary to establish grasses.

State 4
Grass/Succulent Mix

Community 4.1
Grass/Succulent Mix

Grass / Succulent Mix: Increased representations of succulents characterize this site. Increased densities of cholla or pricklypear is recognized as a management concern, but their impact on grass production is unclear. Light to medium cholla or prickly pear infestation doesn't seem to greatly reduce grass production, however it limits access to palatable grasses and interferes with livestock movement and handling. Tobosa and blue grama are the dominant species on this site. Retrogression within this site is characterized by a decrease in blue grama and an increase in succulents, tobosa and burrograss. Diagnosis: Cholla or prickly pear is found at increased densities. Grass cover is variable ranging from uniformly distributed to patchy with frequent areas of bare ground present. Tobosa or blue grama is the dominant grass species. Transition to Grass/Succulent Mix (3a): If fire was historically a part of desert grassland ecosystem and played a role in suppressing seedlings of shrubs and succulents, then fire suppression may favor the increase of succulents.1 Heavy grazing by livestock or other physical disturbances may help disseminate seed and increase the establishment of succulents. Areas historically overgrazed by sheep are sometimes associated with higher densities of Succulents. Intense hailstorms can spread

pricklypear by breaking off joints causing new plants to take root.3 During severe drought perennial grass cover can decline significantly, leaving resources available for use by more drought tolerant succulents. Cholla and pricklypear are both adapted to and favored by drought due to the ability of their shallow, wide spreading root systems to absorb and store water.4 Key indicators of approach to transition: ? Decrease or change in distribution of grass cover. ? Increase in amount of succulent seedlings. ? Increased cover of succulents. Transition back to Grassland (3b) Fire is an effective means of controlling cholla and prickly pear if adequate grass cover remains to carry fire.2 Cholla greater than two feet tall or pricklypear with a large amount of pads (>15-20) are harder to kill. Chemical control is effective in controlling prickly pear and cholla; apply when growth starts in May. Hand grubbing is also effective if cholla or pricklypear is severed 2-4 inches below ground and care is taken not to let broken joints or pads take root. Stacking and burning piles and grubbing during winter or drought help keeps broken joints and pads from rooting. Prescribed grazing will help ensure proper forage utilization and sustain grass cover.

State 5
Shrub Dominated

Community 5.1
Shrub Dominated

Shrub Dominated: Increased shrub cover characterizes this state. Mesquite, creosotebush, and/or tarbush are the dominant shrub species. Burrograss or tobosa is the dominant grass species. Grass cover is decreased, typically patchy with large bare areas present; however, sometimes grass cover can remain relatively high for extended periods when associated with light to moderate infestations of mesquite. Variations in soil characteristics play a part in determining which shrub species increase. Mesquite is well adapted to a wide range of soil types, but increases more often on deep soils low in carbonates, that have a sandy surface overlying finer textured soils. Tarbush prefers finer textured, calcareous soils, usually in lower positions that receive some extra water. Creosotebush is less tolerant of fine textured soils, preferring sandy, calcareous soils that have some gravel. Creosotebush also does well on soils that are shallow over caliche. Retrogression within this state is characterized by a decrease in tobosa, and an increase in burrograss. As the site continues to degrade shrub cover continues to increase and grass cover is severely reduced. Diagnosis: Mesquite, Creosotebush, and/or tarbush are the dominant shrubs. Blue grama and black grama cover is low or absent. Burrograss or tobosa are the dominant grasses. Typically grass cover is patchy with large interconnected bare areas present. Physical soil crusts are present, especially on silt loam surface soils. Transition to Shrub Dominated (4a): Wildlife and livestock consume and disperse mesquite seeds. Flood events may wash creosote or tarbush seeds off adjacent gravelly sites onto the loamy site and supply adequate moisture for germination. Persistent loss of grass cover due to overgrazing or drought can cause large bare patches, providing competition free areas for shrub seedling establishment. As shrub cover increases, competition for soil resources, especially water, becomes a major factor in further reducing grass cover. Reduction of fire, due to either fire suppression policy or loss of adequate fine fuels may increase the probability of shrub encroachment. Increased soil surface physical crusts and associated decreased infiltration, may prevent the establishment of grass seedlings. Transition to Shrub Dominated (5): The dispersal of creosotebush, tarbush or mesquite seed, combined with loss of grass cover and resource competition by shrubs may cause this transition. Key indicators of approach to transition: ? Decreased grass and litter cover. ? Increased bare patch size. ? Increased physical soil crusts. ? Increased amount of mesquite, creosotebush, or tarbush seedlings. ? Increased shrub cover. Transition back to Grassland (4b) Brush control will be necessary to remove shrubs and eliminate competition for resources necessary for grass establishment or reproduction. Seeding may be necessary on those sites where desired grass species are absent or very limited. Pitting and seeding may increase the chances of successful grass establishment. Prescribed grazing will help ensure adequate time is elapsed before grazing seeded area is allowed and proper forage utilization following seeding establishment. Transition to Bare State (6): If grass cover on the shrub-dominated state is severely limited and shrubs are removed a bare state may result. This transition will depend on amount of grasses or seed remaining, whether site is seeded, or if seeding is successful. Transition to Bare State (7): Removal of succulents and continued overgrazing or drought may cause loss of remaining grasses and erosion. Soil surface physical crusting may also be an important factor in inhibiting grass seedling establishment

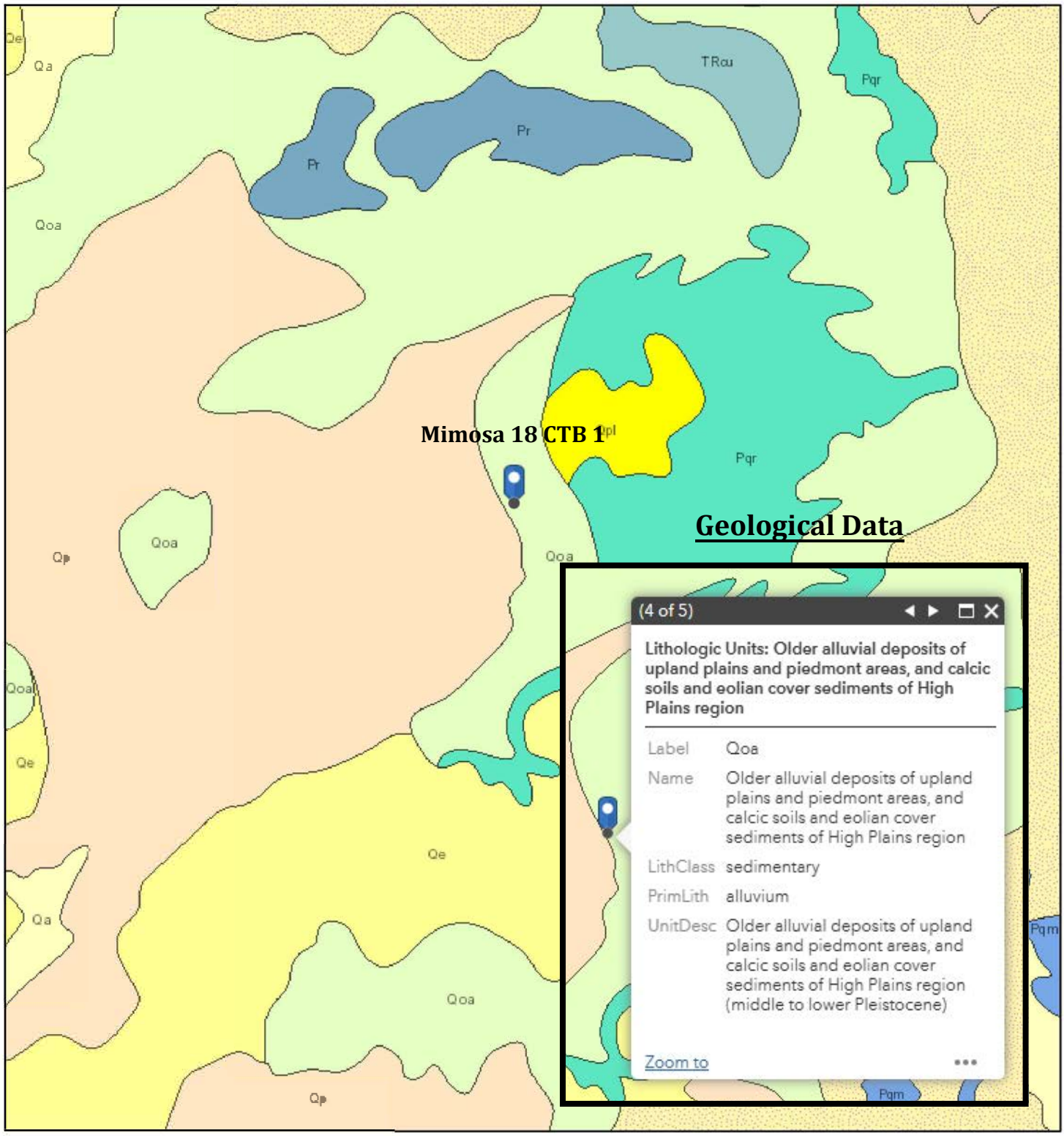
Additional community tables

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**			278–324	
	tobosagrass	PLMU3	*Pleuraphis mutica*	278–324	–
2	**Warm Season**			9–46	
	burrograss	SCBR2	*Scleropogon brevifolius*	9–46	–
3	**Warm Season**			231–278	
	black grama	BOER4	*Bouteloua eriopoda*	231–278	–
	blue grama	BOGR2	*Bouteloua gracilis*	231–278	–
4	**Warm Season**			28–46	
	sideoats grama	BOCU	*Bouteloua curtipendula*	28–46	–
5	**Warm Season**			46–93	
	bush muhly	MUPO2	*Muhlenbergia porteri*	46–93	–
	plains bristlegrass	SEVU2	*Setaria vulpiseta*	46–93	–
6	**Warm Season**			9–28	
	Arizona cottontop	DICA8	*Digitaria californica*	9–28	–
7	**Warm Season**			46–93	
	threeawn	ARIST	*Aristida*	46–93	–
	muhly	MUHLE	*Muhlenbergia*	46–93	–
	sand dropseed	SPCR	*Sporobolus cryptandrus*	46–93	–
8	**Warm Season**			28–46	
	Graminoid (grass or grass-like)	2GRAM	*Graminoid (grass or grass-like)*	28–46	–
Shrub/Vine					
9	**Shrub**			9–28	
	fourwing saltbush	ATCA2	*Atriplex canescens*	9–28	–
	jointfir	EPHED	*Ephedra*	9–28	–
	winterfat	KRLA2	*Krascheninnikovia lanata*	9–28	–
	cane bluestem	BOBA3	*Bothriochloa barbinodis*	5–24	–
	Arizona cottontop	DICA8	*Digitaria californica*	5–24	–
	plains bristlegrass	SEVU2	*Setaria vulpiseta*	5–24	–
10	**Shrub**			9–28	
	javelina bush	COER5	*Condalia ericoides*	9–28	–
	broom snakeweed	GUSA2	*Gutierrezia sarothrae*	9–28	–
	Grass, annual	2GA	*Grass, annual*	5–15	–
11	**Shrubs**			9–28	
	Shrub (>.5m)	2SHRUB	*Shrub (>.5m)*	9–28	–
Forb					
12	**Forb**			9–46	
	threadleaf ragwort	SEFLF	*Senecio flaccidus var. flaccidus*	9–46	–
	globemallow	SPHAE	*Sphaeralcea*	9–46	–
	verbena	VEPO4	*Verbena polystachya*	9–46	–
	broom snakeweed	GUSA2	*Gutierrezia sarothrae*	5–15	–
	pricklypear	OPUNT	*Opuntia*	5–15	–

13	**Forb**			9–28	
	croton	CROTO	*Croton*	9–28	–
	woolly groundsel	PACA15	*Packera cana*	9–28	–
14	**Forb**			9–28	
	Goodding's tansyaster	MAPIG2	*Machaeranthera pinnatifida ssp. gooddingii var. gooddingii*	9–28	–
	woolly paperflower	PSTA	*Psilostrophe tagetina*	9–28	–
15	**Forb**			9–28	
	redstem stork's bill	ERCI6	*Erodium cicutarium*	9–28	–
	Texas stork's bill	ERTE13	*Erodium texanum*	9–28	–
16	**Forb**			9–28	
	Forb (herbaceous, not grass nor grass-like)	2FORB	*Forb (herbaceous, not grass nor grass-like)*	9–28	–

Mimosa 18 CTB 1 Geological Map



5/18/2025, 4:50:26 PM

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

Lithologic Contacts

- Contact, Exposed
- Contact, Gradational
- Nomenclature change
- Map Boundary

Lithologic Units

- Playa—Alluvium and evaporite deposits (Holocene)

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

ArcGIS Web AppBuilder

APPENDIX C

CORRESPONDENCE

Outlook

nAPP251828007 Mimosa 18 CTB 1 Liner Inspection Notification SLO/NMOCD

From Monica Peppin <Monica.Peppin@kljeng.com>
Date Mon 2025-05-19 9:00 AM
To Raley, Jim <jim.raley@dvn.com>
Cc Will Harmon <will.harmon@kljeng.com>

Jim,

Please see the liner inspection notice below. If anything needs to be adjusted, feel free to let me know and I will proceed accordingly.

KLJ Engineering anticipates conducting liner inspection activities at the following site on Wednesday, May 21, 2025 at approximately 10:30 AM. Details Below:

Proposed Date:	Wednesday May 21, 2025
Time Frame:	10:00 AM - 11:00 AM
Site Name:	Mimosa 18 CTB 1
Incident ID:	nAPP2511828007
API/Facility ID:	fAPP2405030777

Liner Inspection Notification	
Incident ID and Site Name:	nAPP2511828007 Mimosa 18 CTB 1
API # and Corresponding Agency:	fAPP2405030777 NMOCD/SLO
Question	**Answer (Fill In)**
What is the liner inspection surface area in square feet (secondary containmet):	5500 sq ft approximately
Have all the impacted materials been removed from the liner and cleaned?	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC: 48 HOURS PRIOR TO INSPECTION	5.21.25 at 10:30 AM
Time liner inspection will commence:	
Please provide any information necessary for observers to contact inspector: (Name and Number)	575.909.3418 Monica Peppin
Please provide any information necessary for navigation to liner inspection site and coordinates (Lat/Long)	Intersection of 62/180 and Burton Flats travel north on Burton Flats for 1.43 miles, turn right onto buckeye travel east for 1.23 miles, turn left go north for 1.43 miles, turn right, travel east 0.24 miles and dead end on site.

Thank you,

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

Book time to meet with me

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Phone: (505) 476-3441

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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 479390

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 479390
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2511828007**
Incident Name	**NAPP2511828007 MIMOSA 18 CTB 1 @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**
Incident Facility	**[fAPP2405030777] MIMOSA 18 CTB 1**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	MIMOSA 18 CTB 1
Date Release Discovered	04/27/2025
Surface Owner	State

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Corrosion | Flow Line - Production | Produced Water | Released: 25 BBL | Recovered: 25 BBL | Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Pinhole leak on water dump line allowed release of fluids to lined secondary containment. Fluids fully recovered.

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QUESTIONS (continued)

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QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*

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

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 06/26/2025

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QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 479390
	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 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	High
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	05/21/2025
On what date will (or did) the final sampling or liner inspection occur	05/21/2025
On what date will (or was) the remediation complete(d)	05/21/2025
What is the estimated surface area (in square feet) that will be remediated	6000
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: 479390
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
Is (or was) there affected material present needing to be removed	Yes
Is (or was) there a power wash of the lined containment area (to be) performed	Yes
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 06/26/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 479390
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Liner Inspection Information	
Last liner inspection notification (C-141L) recorded	**464498**
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	**05/21/2025**
Was all the impacted materials removed from the liner	**Yes**
What was the liner inspection surface area in square feet	**5500**

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	6000
What was the total volume (cubic yards) remediated	0
Summarize any additional remediation activities not included by answers (above)	Liner inspected

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

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 06/26/2025

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CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 479390
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	App ID 479390 Liner Inspection approved	7/3/2025