

2135 S. Loop 250 W
Midland, Texas 79703
United States
www.ghd.com

Our Ref: 12664978-NMOCD-1

April 09, 2025

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

Closure Report
Devon Energy Production Company, LP
Cotton Draw Unit 18 CTB 1
Unit Letter L, Section 18, T25S, R32E
Lea County, New Mexico
(32.125497, -103.719695)

To Whom It May Concern:

1. Introduction

GHD Services Inc. (GHD), on behalf of Devon Energy Production Company, LP (Devon Energy), has prepared this *Closure Report* to document Site assessment activities at Cotton Draw Unit 18 CTB 1 (Site). The purpose of the assessment was to determine the presence or absence of impacts to soil following a release of produced water within a lined containment at the Site. Based on field observations, Devon Energy is submitting this *Closure Report*, describing site assessment activities that have occurred and requesting closure for Incident Number nAPP2506228712.

2. Site Description and Release Summary

The Site is in Unit L, Section 18, Township 25 South, Range 32 East, in Lea County, New Mexico (32.125497 N, -103.719695 W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM). On March 1, 2025, approximately 60 barrels (bbls) of produced water were released into the lined secondary containment due to a pinhole leak that developed on the water dump line. A vacuum truck was dispatched to the Site to recover free-standing fluids; all 60 bbls of released produced water were recovered from within the lined containment. The release was reported to the New Mexico Oil Conservation Division (NMOCD) on March 3, 2025, and was subsequently assigned Incident Number nAPP2506228712.

3. Site Characterization and Closure Criteria

The Site was characterized to assess applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (NMAC 19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are summarized below and a Site Map is presented on **Figure 1**.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soils located within the Site consists of Maljamar and Paloma fine sands. Per the New Mexico Bureau of Geology and Mineral Resources, the shallow geology consists of interlayered eolian sands and piedmont slope deposits, Holocene to middle Pleistocene in age. The Site is located within an area of low karst potential.

Depth to groundwater at the Site is estimated to be greater than 55 feet below ground surface (ft bgs) based on the nearest groundwater well data. Groundwater was determined utilizing the New Mexico Office of the State Engineers (NMOSE) database for registered water wells. The nearest permitted groundwater well with depth to groundwater data is NMOSE well C 04618-POD1 located approximately 0.23 miles southeast of the release. The well was completed to a depth of 55 ft bgs on June 1, 2022. No groundwater was encountered during drilling activities or recorded following a 72-hour observation period. The well was plugged on June 7, 2022. A copy of the referenced well record is included in **Attachment 1**.

The nearest fresh water well for livestock watering purposes is located approximately 3.73 miles southwest of the Site. The Site is approximately 2.75 miles from a lakebed, sinkhole, or playa lake and approximately 3.7 miles from an occupied residence, school, hospital, institution, church. The National Wetlands Inventory indicates the closest wetland is a riverine approximately 2.05 miles southwest of the Site. The Site is greater than 3 miles to a freshwater well or spring and is approximately 2.02 miles of a 100-year floodplain. The nearest subsurface mine in the area is greater than 5 miles away and the Site is not underlain by unstable geology. The location of the Site is depicted on **Figure 1**. A detailed map of the Site is provided on **Figure 2**. The Site Characterization Documentation is included in **Attachment 2**.

Based on the results of the Site Characterization desktop, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

Table 1 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29.12)

Regulatory Standard	Benzene (mg/kg)	BTEX (mg/kg)	TPH (GRO+DRO) (mg/kg)	TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
19.15.29.12 NMAC Table I Closure Criteria for Soils Impacted by a Release.	10	50	1,000	2,500	10,000
Notes: --- = not defined TPH = total petroleum hydrocarbons GRO+DRO+MRO = Gasoline Range Organics + Diesel Range Organics + Motor Oil/Lube Range Organics BTEX = benzene, toluene, ethylbenzene, and xylene					

4. Site Assessment Activities

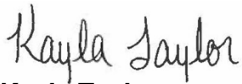
The liner inspection notice was provided to NMOCD on March 6, 2025. A liner integrity inspection was completed on March 12, 2025, after the secondary containment was cleaned for a visual inspection. The liner was visually inspected and no rips, tears, holes, or damages in the liner was observed. The liner was

determined to be intact with no integrity issues. Photographic documentation of the liner inspection is presented in Attachment 3.

5. Closure Request

Based on the liner inspection and assessment activities at the Site, Devon Energy respectfully requests that no further actions be required, and requests closure of Incident Number nAPP2506228712 be granted.

Regards,



Kayla Taylor
Senior Project Manager

432-210-5443
Kayla.Taylor@ghd.com

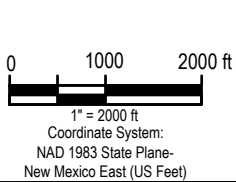
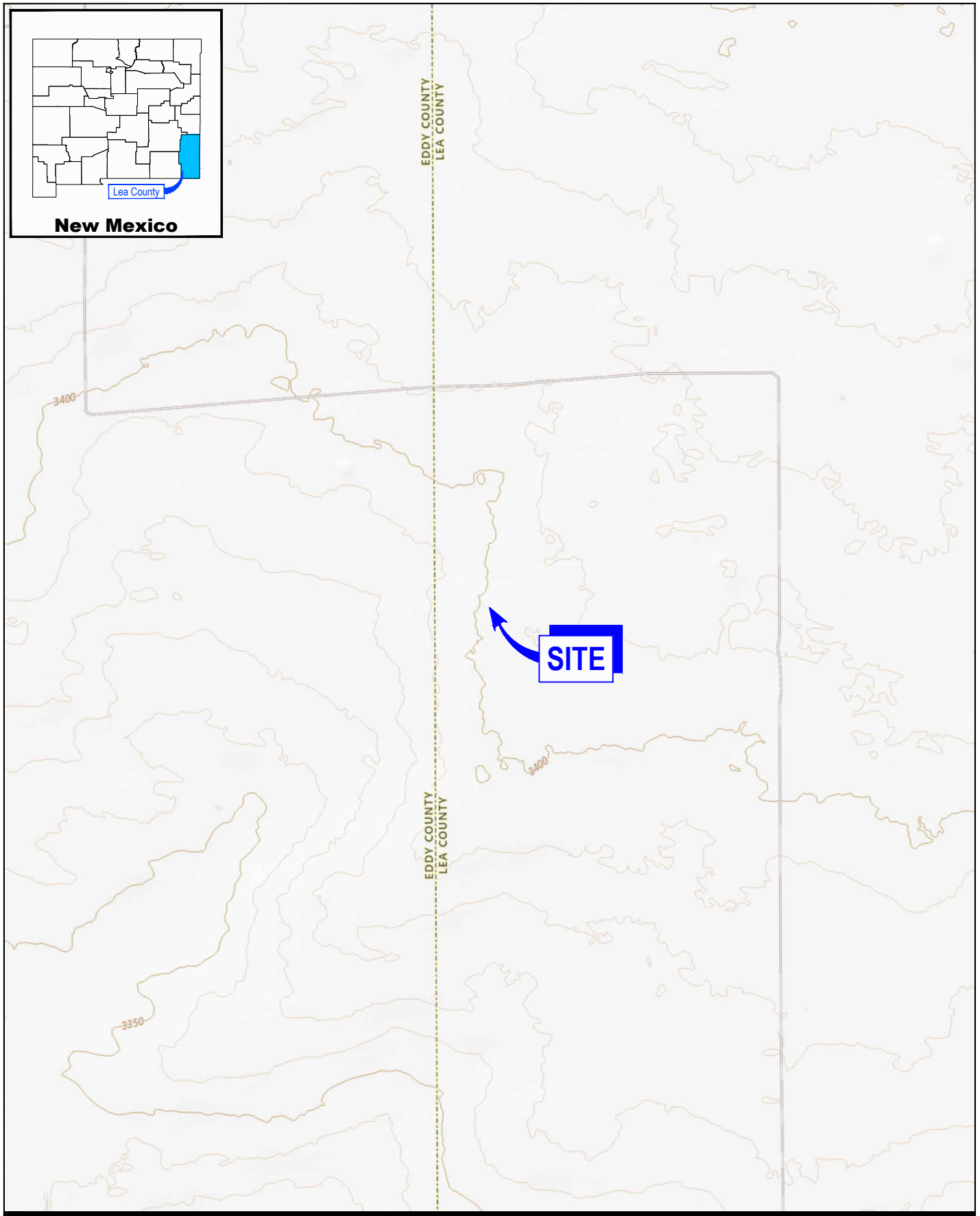


Jessica Wright
Project Director

713- 337-5419
Jessica.Wright@ghd.com

KT/kdn/1

Encl. Figure 1 - Site Location Map
 Figure 2 - Site Details Map
 Attachment 1- Referenced Well Records
 Attachment 2 - Site Characterization Documentation
 Attachment 3- Photographic Documentation



DEVON ENERGY PRODUCTION COMPANY, LP
LEA COUNTY, NEW MEXICO
COTTON DRAW 18 CTB 1
INCIDENT No. nAPP2506228712

Project No. 12664978
Date March 2025

SITE LOCATION MAP

FIGURE 1

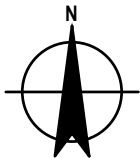


LEGEND

CONTAINMENT AREA



Coordinate System:
NAD 1983 State Plane-
New Mexico East (US Feet)



DEVON ENERGY PRODUCTION COMPANY, LP
LEA COUNTY, NEW MEXICO
COTTON DRAW 18 CTB 1
INCIDENT No. nAPP2506228712

Project No. 12664978
Date March 2025

SITE DETAILS MAP

FIGURE 2

Attachments

Attachment 1

Referenced Well Reports

File No.

C-4618 POD1

NEW MEXICO OFFICE OF THE STATE ENGINEER



WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

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

Purpose:

☐Pollution Control
And/Or Recovery☐

Ground Source Heat Pump

☐ Exploratory Well (Pump test)☐Construction Site/Public
Works Dewatering☒

Other(Describe): Groundwater Determination

☐ Monitoring Well☐

Mine Dewatering

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

☐ Temporary Request - Requested Start Date:

Requested End Date:

Plugging Plan of Operations Submitted? ☒ Yes ☐ No

1. APPLICANT(S)

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

OSE OIT MAY 11 2022 AM 8:53

FOR OSE INTERNAL USE

Application for Permit, Form WR-07, Rev 11/17/16

File No.: C-4618	Tm. No.: 725951	Receipt No.: 2-44561
Trans Description (optional): MON		
Sub-Basin: CUB	PCW/LOG Due Date: 5/19/23	

Page 1 of 3

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

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).

District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

- ☐ NM State Plane (NAD83) (Feet)
 ☐ UTM (NAD83) (Meters)
 ☒ Lat/Long (WGS84) (to the nearest 1/10th of second)
- ☐ NM West Zone
 ☐ Zone 12N
- ☐ NM East Zone
 ☐ Zone 13N
- ☐ NM Central Zone

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
C- POD1(TW-1)	-103°43'0.69"	32°7'25.94"	SW SE SW Sec.18 T25S R32S NMPM

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)

Additional well descriptions are attached: ☐ Yes ☒ No **If yes, how many** _____

Other description relating well to common landmarks, streets, or other:
 Site ID:23
 Location Name:Cotton Draw Unit 507H

Well is on land owned by: Bureau of Land Management

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

Approximate depth of well (feet): 55	Outside diameter of well casing (inches): 2.375 or 1.315
Driller Name: Jackie D. Atkins	Driller License Number: 1249

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

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

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FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:

C-4618

Trn No.:

725951

Page 2 of 3

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

Exploratory: <input type="checkbox"/> Include a description of any proposed pump test, if applicable.	Pollution Control and/or Recovery: <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge.	Construction De-Watering: <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	Mine De-Watering: <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water.
Monitoring: <input type="checkbox"/> Include the reason for the monitoring well, and, <input type="checkbox"/> The duration of the planned monitoring.	<input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	Ground Source Heat Pump: <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	<input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.

ACKNOWLEDGEMENT

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

Print Name(s)

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

Dale Woodall

Dale Woodall (Apr 25, 2022 11:04 MDT)

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☒ approved

☐ partially approved

☐ denied

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

Witness my hand and seal this 19th day of May 20 22, for the State Engineer,

Mike A. Hamman, P.E.

State Engineer

OSE DIT MAY 11 2022 AM 3:54

By:

Signature

K. Parckh

Print

Kashyap Parckh

Title:
Print

Water Resources Manager I

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:

C-4618

Trn No.:

725951

Page 3 of 3

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

SPECIFIC CONDITIONS OF APPROVAL

- 17-16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.
- 17-1A Depth of the well shall not exceed the thickness of the valley fill.
- 17-4 No water shall be appropriated and beneficially used under this permit.
- 17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

Trn Desc: C 04618 POD1

File Number: C 04618

Trn Number: 725951

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

SPECIFIC CONDITIONS OF APPROVAL (Continued)

- 17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- 17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.
- 17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- 17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.
- 17-Q The State Engineer retains jurisdiction over this permit.
- 17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

Trn Desc: C 04618 POD1

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

SPECIFIC CONDITIONS OF APPROVAL (Continued)

LOG The Point of Diversion C 04618 POD1 must be completed and the Well Log filed on or before 05/19/2023.

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

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 05/11/2022	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

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

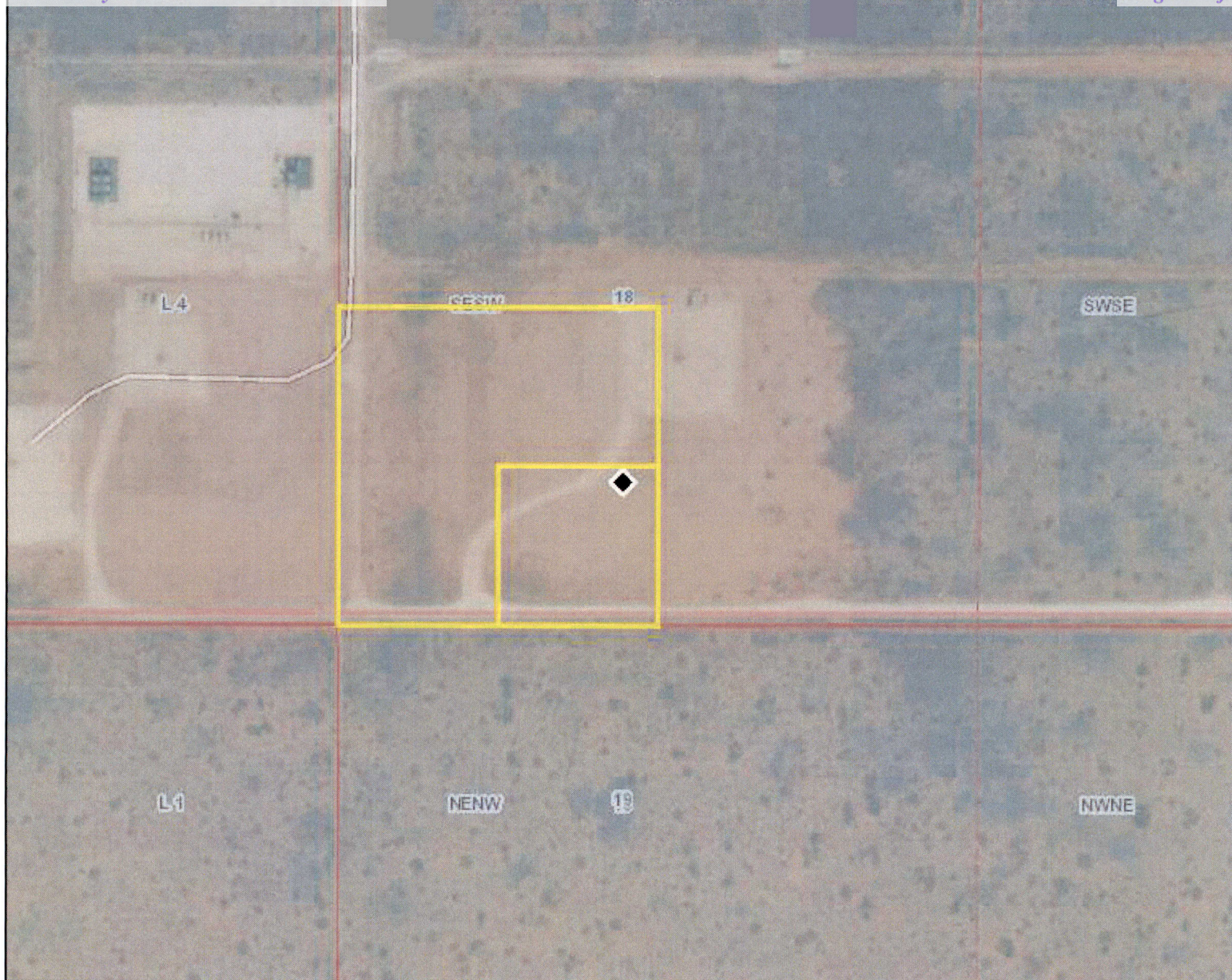
Witness my hand and seal this 19 day of May A.D., 2022

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

By: K. Parekh
KASHYAP PAREKH

Trn Desc: C 04618 POD1

File Number: C 04618
Trn Number: 725951



NEW MEXICO OFFICE
OF THE
STATE ENGINEER

Coordinates
UTM - NAD 83 (m) - Zone 13

Easting 621041.661
Northing 3554886.337

State Plane - NAD 83 (f) - Zone E

Easting 732184.482
Northing 409344.773

Degrees Minutes Seconds

Latitude 32 : 7 : 25.940000
Longitude -103 : 43 : 0.690000

Location pulled from Coordinate Search

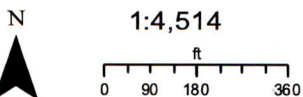


Image Info

Source: Maxar
Date: 5/16/2021
Resolution (m): 0.5
Accuracy (m): 5

Spatial Information

OSE Administrative Area: Lea
County: Lea
Groundwater Basin: Carlsbad
Abstract Area: Carlsbad 72-12-1
Carlsbad Underground Basin
Sub-Basin: Lower Pecos-Red Bluff Reservoir

Land Grant: Not in Land Grant Restrictions:

PLSS Description

SESWSESW Qtr of Sec 18 of 025S 032E

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

POD Information

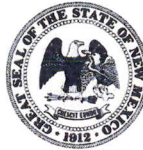
Owner:
File Number:
POD Status: NoData
Permit Status: NoData
Permit Use: NoData
Purpose:

	Calculated PLSS	Carton County Parcels 2021	Eddy County Parcels 2021	Los Alamos County Parcels 2021	Rio Arriba County Parcels 2021	Santa Fe County Parcels 2021
Coord Search Location						
Water Right Regulations						
Closure Area						
OSE District Boundary						
Federal Lands						
Counties						
Bernalillo County Parcels 2021						

5/17/20

Reasonable efforts have been made by the New Mexico Department of Homeland Security & Emergency Management (DHSEM) to verify that these maps accurately interpret the source data. In their preparation, however, a degree of error is inherent in all maps, and the DHSEM may, consequently, have made some omissions and/or errors in scale, resolution, certification, position of accuracy, development, match or

Mike A. Hamman, P.E.
State Engineer



Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

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

Trn Nbr: 725951
File Nbr: C 04618

May. 24, 2022

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

Greetings:

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

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

- * If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
- * If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
- * The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
- * This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Azucena Ramirez".

Azucena Ramirez
(575) 622-6521

Enclosure

explore

Form 4-218
(December 1949)

5934

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTOffice New MexicoSerial LC 061873

NONCOMPETITIVE

LEASE OF OIL AND GAS LANDS UNDER THE ACT OF
FEBRUARY 25, 1920, AS AMENDED

THIS INDENTURE OF LEASE, entered into, in triplicate, as of the **MAR 1 1951**
day of by and between the UNITED STATES OF AMERICA, through the
Bureau of Land Management, party of the first part, and **Jack B. Shaw**
Box 383
Artesia, New Mexico

party of the second part, hereinafter called the lessee, under, pursuant, and
subject to the terms and provisions of the act of February 25, 1920 (41 Stat. 437),
as amended, hereinafter referred to as the act, and to all reasonable regulations
of the Secretary of the Interior now or hereafter in force when not inconsistent
with any express and specific provisions herein, which are made a part hereof,
WITNESSETH:

SECTION 1. Rights of Lessee.—That the lessor, in consideration of rents and
royalties to be paid, and the conditions and covenants to be observed as herein set
forth, does hereby grant and lease to the lessee the exclusive right and privilege
to drill for, mine, extract, remove, and dispose of all the oil and gas deposits
except helium gas in or under the following-described tracts of land situated ~~in~~

T. 25 S., R. 32 E., NMPM, New Mexico

Sec. 7, Lots 3, 4, EAST, SW

8, All

9, All

17, All, SW

18, All

containing **2398.49** acres, more or less, together with the right to construct and
maintain thereupon all works, buildings, plants, waterways, roads, telegraph or
telephone lines, pipe lines, reservoirs, tanks, pumping stations, or other struc-
tures necessary to the full enjoyment thereof, for a period of 5 years, and so long
thereafter as oil or gas is produced in paying quantities; subject to any unit
agreement heretofore or hereafter approved by the Secretary of the Interior, the
provisions of said agreement to govern the lands subject thereto where inconsisten-
cies with the terms of this lease occur.

SEC. 2. In consideration of the foregoing, the lessee hereby agrees:

(a) Bonds.—(1) To maintain any bond furnished by the lessee as a condition
for the issuance of this lease. (2) If the lease is issued noncompetitively, to
furnish a bond in a sum double the amount of the \$1 per acre annual rental, but not
less than \$1,000 nor more than \$5,000, upon the inclusion of any part of the leased
land within the geologic structure of a producing oil or gas field. (3) To furnish
prior to beginning of drilling operations and maintain at all times thereafter as
required by the lessor a bond in the penal sum of \$5,000 with approved corporate
surety, or with deposit of United States bonds as surety therefor, conditioned upon
compliance with the terms of this lease, unless a bond in that amount is already
being maintained or unless such a bond furnished by an approved operator of the
lease is accepted.

(1)

16-50705-4

Until a general lease bond is filed a noncompetitive lessee will be required to furnish and maintain a bond in the penal sum of not less than \$1,000 in those cases in which a bond is required by law for the protection of the owners of surface rights. In all other cases where a bond is not otherwise required, a \$1,000 bond must be filed for compliance with the lease obligations not less than 90 days before the due date of the next unpaid annual rental, but this requirement may be successively dispensed with by payment of each successive annual rental not less than 90 days prior to its due date.

(b) Cooperative or unit plan.—Within 30 days of demand, or if the land is within an approved unit plan, in the event such a plan is terminated prior to the expiration of this lease, within 30 days of demand made thereafter, to subscribe to and to operate under such reasonable cooperative or unit plan for the development and operation of the area, field, or pool, or part thereof, embracing the lands included herein as the Secretary of the Interior may determine to be practicable and necessary or advisable, which plan shall adequately protect the rights of all parties in interest, including the United States.

(c) Wells.—(1) To drill and produce all wells necessary to protect the leased land from drainage by wells on lands not the property of the lessor or lands of the United States leased at a lower royalty rate, or in lieu of any part of such drilling and production, with the consent of the Director of the Geological Survey, to compensate the lessor in full each month for the estimated loss of royalty through drainage in the amount determined under instructions of said Secretary; (2) at the election of the lessee, to drill and produce other wells in conformity with any system of well spacing or production allotments affecting the field or area in which the leased lands are situated, which is authorized and sanctioned by applicable law or by the Secretary of the Interior; and (3) promptly after due notice in writing to drill and produce such other wells as the Secretary of the Interior may require to insure diligence in the development and operation of the property.

(d) Rentals and royalties.—(1) To pay the rentals and royalties set out in the rental and royalty schedule attached hereto and made a part hereof.

(2) It is expressly agreed that the Secretary of the Interior may establish reasonable minimum values for purposes of computing royalty on any or all oil, gas, natural gasoline, and other products obtained from gas; due consideration being given to the highest price paid for a part or for a majority of production of like quality in the same field, to the price received by the lessee, to posted prices and to other relevant matters and, whenever appropriate, after notice and opportunity to be heard.

(3) When paid in value, such royalties on production shall be due and payable monthly on the last day of the calendar month next following the calendar month in which produced. When paid in amount of production, such royalty products shall be delivered in merchantable condition on the premises where produced without cost to lessor, unless otherwise agreed to by the parties hereto, at such times and in such tanks provided by the lessee as reasonably may be required by the lessor, but in no case shall the lessee be required to hold such royalty oil or other products in storage beyond the last day of the calendar month next following the calendar month in which produced. The lessee shall not be responsible or held liable for the loss or destruction of royalty oil or other products in storage from causes over which he has no control.

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(4) Royalties shall be subject to reduction on the entire leasehold or on any portion thereof segregated for royalty purposes if the Secretary of the Interior finds that the lease cannot be successfully operated upon the royalties fixed herein, or that such action will encourage the greatest ultimate recovery of oil or gas or promote conservation.

(e) Contracts for disposal of products.—Not to sell or otherwise dispose of oil, gas, natural gasoline, and other products of the lease except in accordance with a contract or other arrangement first approved by the Director of the Geological Survey or his representative, such approval to be subject to review by the Secretary of the Interior but to be effective unless and until revoked by the Secretary or the approving officer, and to file with such officer all contracts or full information as to other arrangements for such sales.

16-50705-1

4-213
(December 1949)

(f) Statements, plats, and reports.—At such times and in such form as the lessor may prescribe, to furnish detailed statements showing the amounts and quality of all products removed and sold from the lease, the proceeds therefrom, and the amounts used for production purposes or unavoidably lost; a plat showing development work and improvements on the leased lands and a report with respect to stockholders, investment, depreciation, and costs.

(g) Well records.—To keep a daily drilling record, a log, and complete information on all well surveys and tests in form acceptable to or prescribed by the lessor of all wells drilled on the leased lands, and an acceptable record of all subsurface investigations affecting said lands, and to furnish them, or copies thereof, to the lessor when required.

(h) Inspection.—To keep open at all reasonable times for the inspection of any duly authorized officer of the Department, the leased premises and all wells, improvements, machinery, and fixtures thereon and all books, accounts, maps, and records relative to operations and surveys or investigations on the leased lands or under the lease.

(i) Payments.—Unless otherwise directed by the Secretary of the Interior, to make rental, royalty, or other payments to the lessor, to the order of the Treasurer of the United States, such payments to be tendered to the manager of the district land office in the district in which the lands are located or to the Director of the Bureau of Land Management if there is no district land office in the State in which the lands are located.

(j) Diligence—Prevention of waste—Health and safety of workmen.—To exercise reasonable diligence in drilling and producing the wells herein provided for unless consent to suspend operations temporarily is granted by the lessor; to carry on all operations in accordance with approved methods and practice as provided in the operating regulations, having due regard for the prevention of waste of oil or gas or damage to deposits or formations containing oil, gas, or water or to coal measures or other mineral deposits, for conservation of gas energy, for the preservation and conservation of the property for future productive operations, and for the health and safety of workmen and employees; to plug properly and effectively all wells before abandoning the same; to carry out at expense of the lessee all reasonable orders of the lessor relative to the matters in this paragraph, and that on failure of the lessee so to do, the lessor shall have the right to enter on the property and to accomplish the purpose of such orders at the lessee's cost. Provided, that the lessee shall not be held responsible for delays or casualties occasioned by causes beyond lessee's control.

(k) Taxes and wages—Freedom of purchase.—To pay when due, all taxes lawfully assessed and levied under the laws of the State or the United States upon improvements, oil, and gas produced from the lands hereunder; or other rights, property, or assets of the lessee; to accord all workmen and employees complete freedom of purchase, and to pay all wages due workmen and employees at least twice each month in the lawful money of the United States.

(l) Nondiscrimination.—Not to discriminate against any employee or applicant for employment because of race, creed, color, or national origin, and to require an identical provision to be included in all subcontracts.

(m) Assignment of oil and gas lease or interest therein.—To file within 90 days from the date of final execution any instrument of transfer made of this lease, or any interest therein, including assignments of record title, working or royalty interests, operating agreements and subleases for approval, such instrument to take effect upon its final approval by the Director, Bureau of Land Management, as of the first day of the lease month following the date of filing in the proper land office.

(n) Pipe lines to purchase or convey at reasonable rates and without discrimination.—If owner, or operator, or owner of a controlling interest in any pipe line or of any company operating the same which may be operated accessible to the oil or gas derived from lands under this lease, to accept and convey and, if a purchaser of such products, to purchase at reasonable rates and without discrimination the oil or gas of the Government or of any citizen or company not the owner of any pipe line,

operating a lease or purchasing or selling oil, gas, natural gasoline, or other products under the provisions of the act.

(o) Reserved deposits.—To comply with all statutory requirements and regulations thereunder, if the lands embraced herein have been or shall hereafter be disposed of under the laws reserving to the United States the deposits of oil and gas therein, subject to such conditions as are or may hereafter be provided by the laws reserving such oil or gas.

(p) Reserved or segregated lands.—If any of the land included in this lease is embraced in a reservation or segregated for any particular purpose, to conduct operations thereunder in conformity with such requirements as may be made by the Director, Bureau of Land Management, for the protection and use of the land for the purpose for which it was reserved or segregated, so far as may be consistent with the use of the land for the purpose of this lease, which latter shall be regarded as the dominant use unless otherwise provided herein or separately stipulated.

(q) Overriding royalties.—To limit the obligation to pay overriding royalties or payments out of production in excess of 5 percent to periods during which the average production per well per day is more than 15 barrels on an entire leasehold or any part of the area thereof or any zone segregated for the computation of royalties.

(r) Deliver premises in cases of forfeiture.—To deliver up the premises leased, with all permanent improvements thereon, in good order and condition in case of forfeiture of this lease; but this shall not be construed to prevent the removal, alteration, or renewal of equipment and improvements in the ordinary course of operations.

SEC. 3. The lessor expressly reserves:

(a) Rights reserved—Easements and rights-of-way.—The right to permit for joint or several use easements or rights-of-way, including easements in tunnels upon, through, or in the lands leased, occupied, or used as may be necessary or appropriate to the working of the same or of other lands containing the deposits described in the act, and the treatment and shipment of products thereof by or under authority of the Government, its lessees or permittees, and for other public purposes.

(b) Disposition of surface.—The right to lease, sell, or otherwise dispose of the surface of any of the lands embraced within this lease which are owned by the United States under existing law or laws hereafter enacted, insofar as said surface is not necessary for the use of the lessee in the extraction and removal of the oil and gas therein.

(c) Monopoly and fair prices.—Full power and authority to promulgate and enforce all orders necessary to insure the sale of the production of the leased lands to the United States and to the public at reasonable prices, to protect the interests of the United States, to prevent monopoly, and to safeguard the public welfare.

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(d) Helium.—Pursuant to section 1 of the act, and section 1 of the act of March 3, 1927 (44 Stat. 1387), as amended, the ownership and the right to extract helium from all gas produced under this lease, subject to such rules and regulations as shall be prescribed by the Secretary of the Interior. In case the lessor elects to take the helium the lessee shall deliver all gas containing same, or portion thereof desired, to the lessor at any point on the leased premises in the manner required by the lessor, for the extraction of the helium in such plant or reduction works for that purpose as the lessor may provide, whereupon the residue shall be returned to the lessee with no substantial delay in the delivery of gas produced from the well to the purchaser thereof. The lessee shall not suffer a diminution of value of the gas from which the helium has been extracted, or loss otherwise, for which he is not reasonably compensated, save for the value of the helium extracted. The lessor further reserves the right to erect, maintain, and operate any and all reduction works and other equipment necessary for the extraction of helium on the premises leased.

(e) Taking of royalties.—All rights pursuant to section 36 of the act, to take royalties in amount or in value of production.

16-80708-2

44213
(December 1949)

(f) Casing.—All rights pursuant to section 40 of the act to purchase casing and lease or operate valuable water wells.

(g) Fissionable materials.—Pursuant to the provisions of the act of August 1, 1946 (Public Law 585, 79th Congress) all uranium, thorium, or other material which has been or may hereafter be determined to be peculiarly essential to the production of fissionable materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine and remove the same, making just compensation for any damage or injury occasioned thereby.

SEC. 4. Drilling and producing restrictions.—It is covenanted and agreed that the rate of prospecting and developing and the quantity and rate of production from the lands covered by this lease shall be subject to control in the public interest by the Secretary of the Interior, and in the exercise of his judgment the Secretary may take into consideration, among other things, Federal laws, State laws, and regulations issued thereunder, or lawful agreements among operators regulating either drilling or production, or both. After unitization, the Secretary of the Interior, or any person, committee, or State or Federal officer or agency so authorized in the unit plan, may alter or modify from time to time, the rate of prospecting and development and the quantity and rate of production from the lands covered by this lease.

SEC. 5. Surrender and termination of lease.—The lessee may surrender this lease or any legal subdivision thereof by filing in the proper land office a written relinquishment, in triplicate, which shall be effective as of the date of filing subject to the continued obligation of the lessee and his surety to make payment of all accrued rentals and royalties and to place all wells on the land to be relinquished in condition for suspension or abandonment in accordance with the regulations and the terms of the lease, to be accompanied by a statement that all wages and moneys due and payable to the workmen employed on the land relinquished have been paid.

SEC. 6. Purchase of materials, etc., on termination of lease.—Upon the expiration of this lease, or the earlier termination thereof pursuant to the last preceding section, the lessor or another lessee may, if the lessor shall so elect within 3 months from the termination of the lease, purchase all materials, tools, machinery, appliances, structures, and equipment placed in or upon the land by the lessee, and in use thereon as a necessary or useful part of an operating or producing plant, on the payment to the lessee of such sum as may be fixed as a reasonable price therefor by a board of three appraisers, one of whom shall be chosen by the lessor, one by the lessee, and the other by the two so chosen; pending such election all equipment shall remain in normal position. If the lessor, or another lessee, shall not within 3 months elect to purchase all or any part of such materials, tools, machinery, appliances, structures, and equipment, the lessee shall have the right at any time, within a period of 90 days thereafter to remove from the premises all the material, tools, machinery, appliances, structures, and equipment which the lessor shall not have elected to purchase, save and except casing in wells and other equipment or apparatus necessary for the preservation of the well or wells. Any materials, tools, machinery, appliances, structures, and equipment, including casing in or out of wells on the leased lands, shall become the property of the lessor, on expiration of the period of 90 days above referred to or such extension thereof as may be granted on account of adverse climatic conditions throughout said period.

SEC. 7. Proceedings in case of default.—If the lessee shall not comply with any of the provisions of the act or the regulations thereunder or make default in the performance or observance of any of the terms, covenants, and stipulations hereof and such default shall continue for a period of 30 days after service of written notice thereof by the lessor, the lease may be canceled by the Secretary of the Interior in accordance with section 31 of the act, as amended, and all materials, tools, machinery, appliances, structures, equipment, and wells shall thereupon become the property of the lessor, except that if said lease covers lands known to contain valuable deposits of oil or gas, the lease may be canceled only by judicial proceedings in the manner provided in section 31 of the act; but this provision shall not be construed to prevent the exercise by the lessor of any legal or equitable remedy which the lessor might otherwise have. A waiver of any particular

10-50705-4

cause of forfeiture shall not prevent the cancellation and forfeiture of this lease for any other cause of forfeiture, or for the same cause occurring at any other time.

SEC. 8. Heirs and successors in interest.—It is further covenanted and agreed that each obligation hereunder shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto.

SEC. 9. Unlawful interest.—It is also further agreed that no Member of, or Delegate to, Congress, or Resident Commissioner, after his election or appointment, or either before or after he has qualified, and during his continuance in office, and that no officer, agent, or employee of the Department of the Interior, shall be admitted to any share or part in this lease or derive any benefit that may arise therefrom; and the provisions of section 3741 of the Revised Statutes of the United States, and sections 431, 432, and 433, title 18, United States Code, relating to contracts, enter into and form a part of this lease so far as the same may be applicable.

IN WITNESS WHEREOF:

THE UNITED STATES OF AMERICA.

For the Director, Bureau of Land Management

By *Paul J. Lang* Manager

P. E. Spencer, Attorney in Law

Mabel K. Loser, Attorney in Law

Witnesses to signature of lessee.

John B. Shaw

Lessee.

U. S. GOVERNMENT PRINTING OFFICE: 16-50705-4

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Schedule "A"
RENTALS AND ROYALTIES

Rentals—To pay the lessor in advance on the first day of the month in which the lease issues a rental at the following rates:

- (a) If the lands are wholly outside the known geologic structure of a producing oil or gas field:
 - (1) For the first lease year, a rental of 50 cents per acre.
 - (2) For the second and third lease years, no rental.
 - (3) For the fourth and fifth years, 25 cents per acre.
 - (4) For the sixth and each succeeding year, 50 cents per acre.
- (b) On leases wholly or partly within the geologic structure of a producing oil or gas field:
 - (1) Beginning with the first lease year after 30 days' notice that all or part of the land is included in such a structure and for each year thereafter, prior to a discovery of oil or gas on the lands herein, \$1 per acre.
 - (2) On the lands committed to an approved cooperative or unit plan which includes a well capable of producing oil or gas and contains a general provision for allocation of production, for the lands not within the participating area an annual rental of 50 cents per acre for the first and each succeeding lease year following discovery.

Minimum royalty—To pay the lessor in lieu of rental at the expiration of each lease year after discovery a minimum royalty of \$1 per acre or, if there is production, the difference between the actual royalty paid during the year and the prescribed minimum royalty of \$1 per acre, provided that on unitized leases, the minimum royalty shall be payable only on the participating acreage.

Royalty on production—To pay the lessor $12\frac{1}{2}$ percent royalty on the production removed or sold from the leased lands.

The average production per well per day for oil and for gas shall be determined pursuant to 30 CFR, Part 221, "Oil and Gas Operating Regulations."

In determining the amount or value of gas and liquid products produced, the amount or value shall be net after an allowance for the cost of manufacture. The allowance for cost of manufacture may exceed two-thirds of the amount or value of any product only on approval by the Secretary of the Interior.

35759

STATE OF NEW MEXICO
COUNTY OF LEA
FILED FOR RECORD

of the

records of my office.

By

Eva Jatum

County Clerk.

Deputy.

1951 at 10³⁵ o'clock *PM* and recorded in Book *94* page *465*

43 X

JOHN E. COCHRAN, JR.

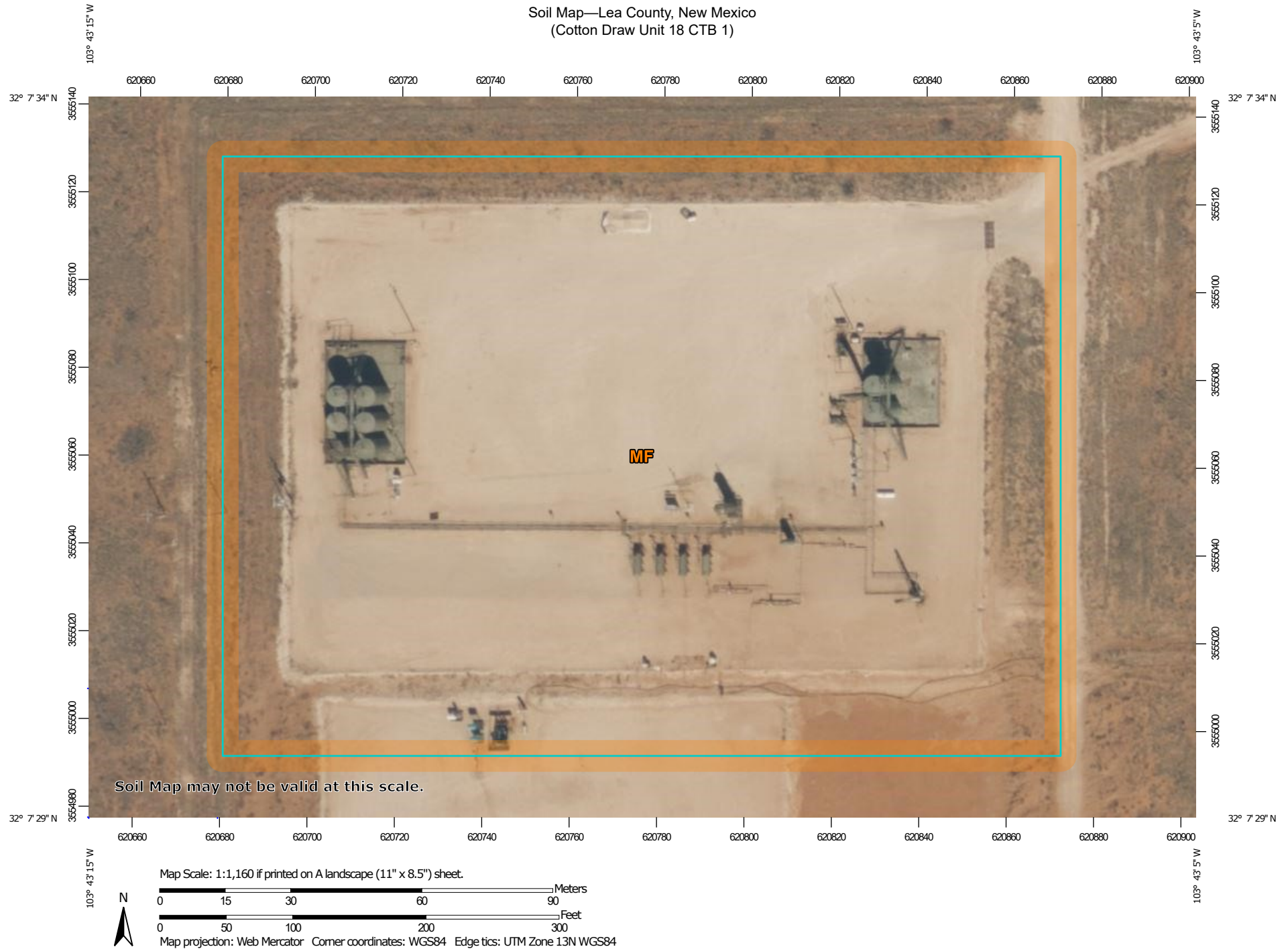
JOHN E. COCHRAN, JR.
ATTORNEY-AT-LAW
ARTESIA, NEW MEXICO

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Attachment 2

Site Characterization Documentation

Soil Map—Lea County, New Mexico
(Cotton Draw Unit 18 CTB 1)



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

3/24/2025
Page 1 of 3

Soil Map—Lea County, New Mexico
(Cotton Draw Unit 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: 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
MF	Maljamar and Palomas fine sands, 0 to 3 percent slopes	6.5	100.0%
Totals for Area of Interest		6.5	100.0%

Map Unit Description: Maljamar and Palomas fine sands, 0 to 3 percent slopes---Lea County,
New Mexico

Cotton Draw Unit 18 CTB 1

Lea County, New Mexico

MF—Maljamar and Palomas fine sands, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: dmqb

Elevation: 3,000 to 3,900 feet

Mean annual precipitation: 10 to 15 inches

Mean annual air temperature: 60 to 62 degrees F

Frost-free period: 190 to 205 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Maljamar and similar soils: 46 percent

Palomas and similar soils: 44 percent

Minor components: 10 percent

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

Description of Maljamar

Setting

Landform: Plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy eolian deposits derived from sedimentary
rock

Typical profile

A - 0 to 24 inches: fine sand

Bt - 24 to 50 inches: sandy clay loam

Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 40 to 60 inches to petrocalcic

Drainage class: Well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Very low
to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

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

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e

Map Unit Description: Maljamar and Palomas fine sands, 0 to 3 percent slopes---Lea County,
New Mexico

Cotton Draw Unit 18 CTB 1

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

Description of Palomas

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sandstone

Typical profile

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

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water
(Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 45 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0
mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.5
inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 5 percent
Ecological site: R070BC022NM - Sandhills
Hydric soil rating: No

Wink

Percent of map unit: 5 percent
Ecological site: R070BD003NM - Loamy Sand

Map Unit Description: Maljamar and Palomas fine sands, 0 to 3 percent slopes---Lea County,
New Mexico

Cotton Draw Unit 18 CTB 1

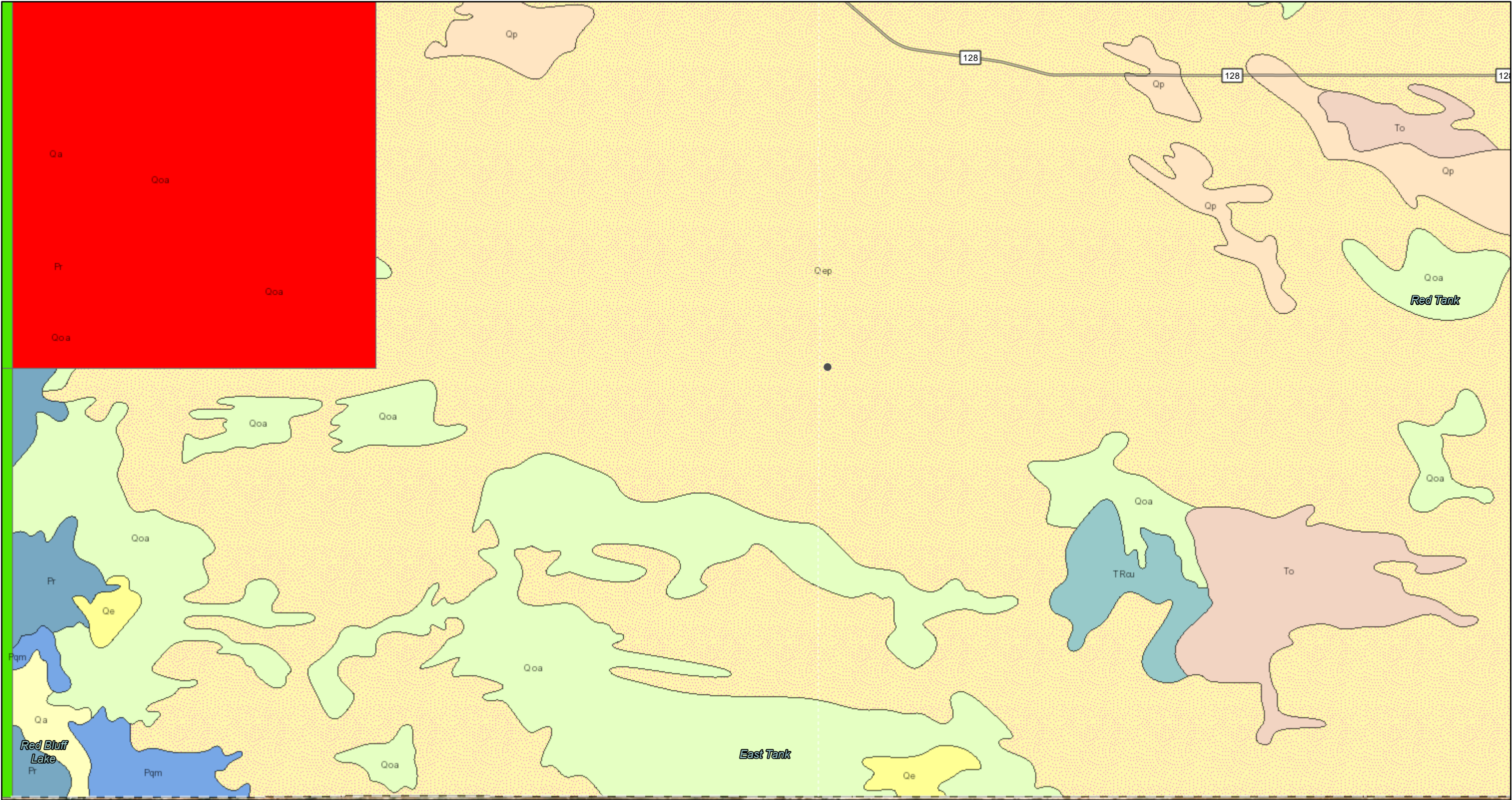
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 21, Sep 3, 2024

Cotton Draw Unit 18 CTB 1



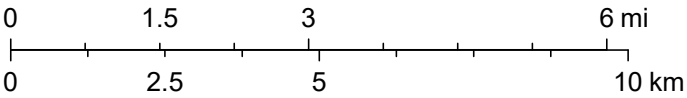
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Lithologic Units

- Playa—Alluvium and evaporite deposits (Holocene)
- Water—Perennial standing water
- Qa—Alluvium (Holocene to upper Pleistocene)
- Ql—Landslide deposits and colluvium (Holocene to Pleistocene) — Landslide deposits on western flanks of Socorro Mountains not shown for clarity
- Qpl—Lacustrine and playa deposits (Holocene) — Includes associated alluvial and eolian deposits of major lake basins
- Qp—Piedmont alluvial deposits (Holocene to lower Pleistocene)
- Qe—Eolian deposits (Holocene to middle Pleistocene)

Qeg—Gypsiferous eolian deposits (Holocene to middle Pleistocene)

1:144,448



Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Earthstar Geographics, NMBGMR

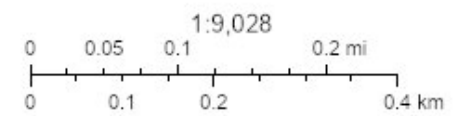
Karst Potential



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Karst Occurrence Potential

Low



BLM, OCD, New Mexico Tech, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, OCD



Cotton Draw Unit 18 CTB 1



March 25, 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.

National Flood Hazard Layer FIRMMette



103°43'32"W 32°7'47"N



Legend

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

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



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/25/2025 at 1:07 AM 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.

Attachment 3

Photographic Documentation

Incident No. naPP2506228712
Lea County, New Mexico



Photo 1 View of northeast corner of secondary containment. Error! Not a valid filename.

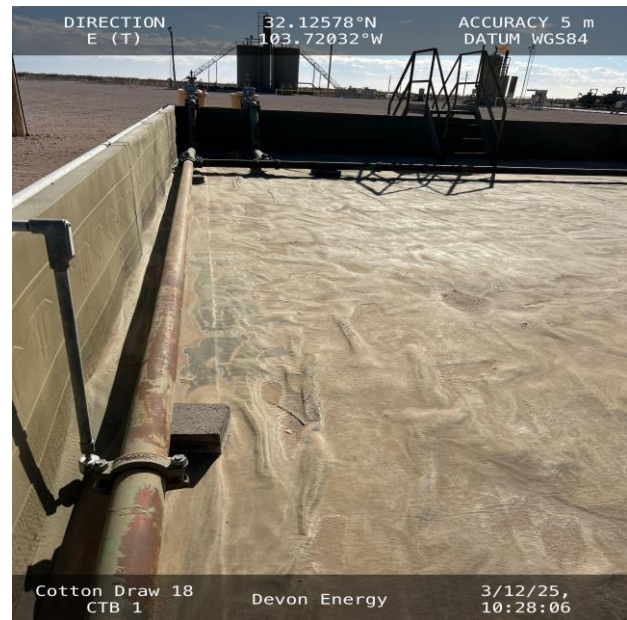


Photo 2 View towards northern portion of secondary containment towards east.

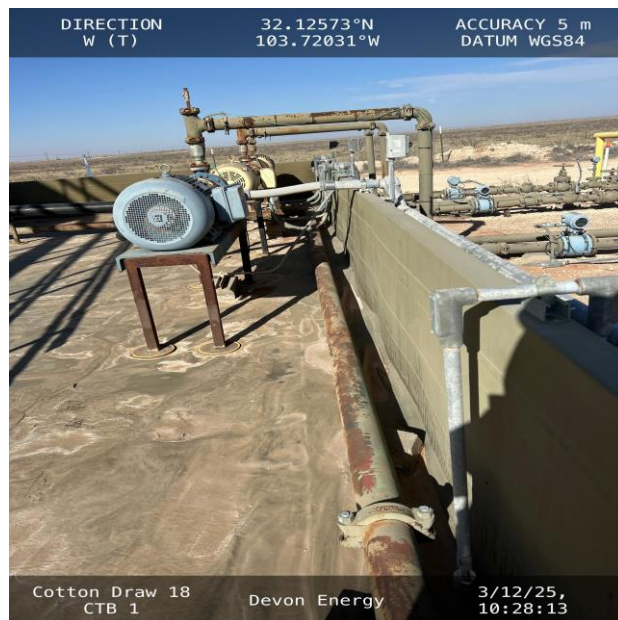


Photo 3 View towards northern portion of secondary containment towards west.



Photo 4 View of southside secondary containment towards east.

Incident No. naPP2506228712
Lea County, New Mexico

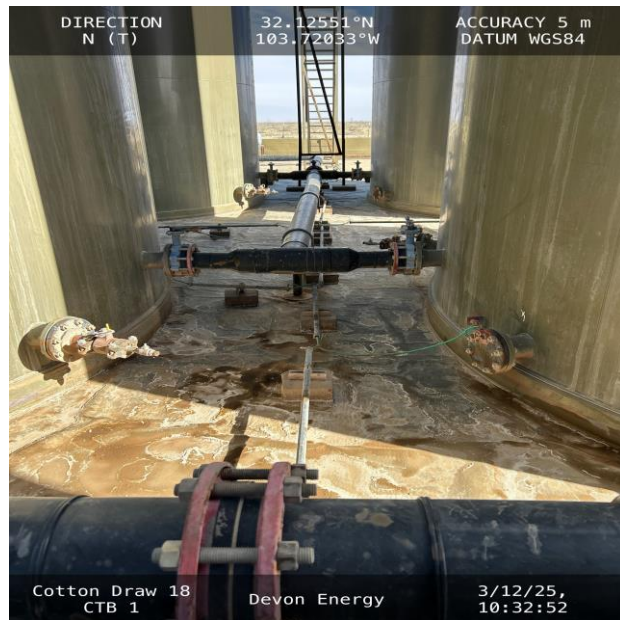


Photo 5 View of central portion of secondary containment to north.

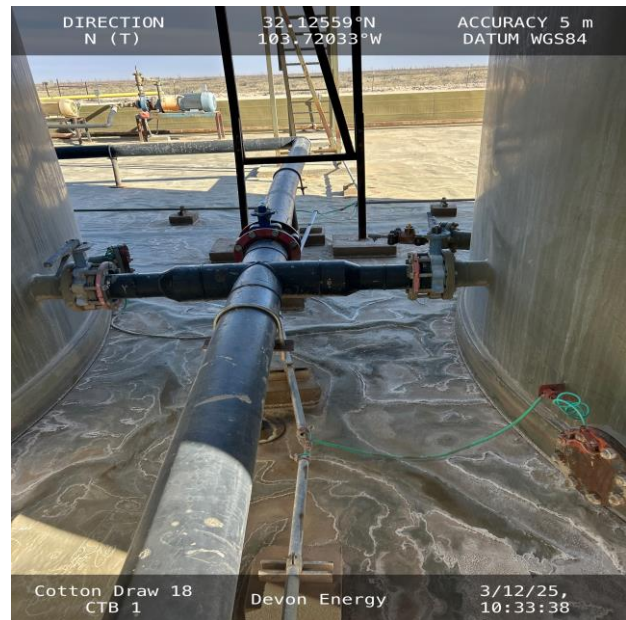


Photo 6 View of central portion of secondary containment towards north.



Photo 7 View of central portion of secondary containment towards south.



Photo 8 View of central portion of secondary containment towards south.

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 450645

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 450645
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2506228712
Incident Name	NAPP2506228712 COTTON DRAW UNIT 18 CTB 1 @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2130731960] COTTON DRAW UNIT 18 CTB 1

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	COTTON DRAW UNIT 18 CTB 1
Date Release Discovered	03/01/2025
Surface Owner	Federal

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

Nature and Volume of Release	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Dump Line Produced Water Released: 60 BBL Recovered: 60 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 developed in water dump line. This allowed 60 bbls to be released to lined secondary containment. Fluids fully recovered. Major notification made via email.

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

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QUESTIONS (continued)

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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@dvsn.com Date: 04/10/2025
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QUESTIONS (continued)

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QUESTIONS

Site Characterization	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	Yes
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	03/10/2025
On what date will (or did) the final sampling or liner inspection occur	03/12/2025
On what date will (or was) the remediation complete(d)	03/12/2025
What is the estimated surface area (in square feet) that will be remediated	5105
What is the estimated volume (in cubic yards) that will be remediated	0
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS (continued)

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QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
Is (or was) there affected material present needing to be removed	Yes
Is (or was) there a power wash of the lined containment area (to be) performed	Yes
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dv.com Date: 04/10/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS (continued)

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QUESTIONS

Liner Inspection Information	
Last liner inspection notification (C-141L) recorded	439954
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	03/12/2025
Was all the impacted materials removed from the liner	Yes
What was the liner inspection surface area in square feet	5105

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	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	5105
What was the total volume (cubic yards) remediated	0
Summarize any additional remediation activities not included by answers (above)	Liner inspected
<i>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>	
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@dmn.com Date: 04/10/2025

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CONDITIONS

Action 450645

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CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2506228712 COTTON DRAW UNIT 18 CTB 1, thank you. This Remediation Closure Report is approved.	4/10/2025