

Well Name: MULE DEER ATU FED COM	Well Location: T21S / R21E / SEC 11 / NESW /	County or Parish/State: EDDY / NM
Well Number: 1	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM100521	Unit or CA Name: MULE DEER FED COM #1	Unit or CA Number: NMNM106846
US Well Number: 300153098500S1	Well Status: Gas Well Shut In	Operator: EOG RESOURCES INCORPORATED

Accepted for record – NMOCD gc 8/20/2021

Notice of Intent

Type of Submission: Notice of Intent	Type of Action Plug and Abandonment
Date Sundry Submitted: 08/09/2021	Time Sundry Submitted: 08:03
Date proposed operation will begin: 09/09/2021	
Procedure Description: Please see attached procedure. Thank you.	

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description
Mule_Deer_ATU_Federal_Com_1_8_9_21_20210809080325.pdf

Conditions of Approval

Specialist Review
Mule_Deer_ATU_Fed_Com_1_Sundry_ID_2627756_P_A_20210814102642.pdf

Received by OCD: 8/16/2021 5:07:03 AM

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US Well Number: 300153098500S1	Well Status: Gas Well Shut In	Operator: EOG RESOURCES INCORPORATED

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: TINA HUERTA	Signed on: AUG 09, 2021 08:03 AM
Name: EOG RESOURCES INCORPORATED	
Title: Regulatory Specialist	
Street Address: 104 SOUTH FOURTH STREET	
City: Artesia	State: NM
Phone: (575) 748-4168	
Email address: tina_huerta@eogresources.com	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: LONG VO	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752345972	BLM POC Email Address: LVO@BLM.GOV
Disposition: Approved	Disposition Date: 08/14/2021
Signature: Long Vo	

11 - 215-21E

High Cave

API: 30-015-30985

Mule Deer ATU Federal Com 1 - NOI to P&A

EOG Resources, Inc. plans to plug and abandon this well as follows:

1. MIRU all safety equipment as needed. NU BOP. POOH with production equipment.
2. Set a CIBP at 5936 ft with ~~4~~^{106x} sx Class C cement on top to 5901 ft. This will cover Cisco perms. *Leak test CIBP*
3. Spot a 25 sx Class C cement plug from 4693 ft - 4441 ft. This will cover Wolfcamp top.
4. Spot a 25 sx Class C cement plug from 3522 ft - 3270 ft. This will cover Abo top.
5. Spot a 25 sx Class C cement plug from 2920 ft - 2668 ft. This will cover Tubb top.
6. Perforate at 2116 ft. Spot a 25 sx Class C cement plug from 2116 ft - 1864 ft. WOC and tag. This will cover Yeso, Glorieta tops and intermediate casing shoe.
7. Perforate at 436 ft. Spot a ~~25~~^{45 sx} sx Class C cement plug from 436 ft - ~~184~~^{surface} ft. WOC and tag. This will cover surface casing shoe. *verify @ surface*
8. ~~Perforate at 100 ft. Spot a 10 sx Class C cement plug from 100 ft up to surface. WOC and tag. Back fill as needed.~~
9. Cut off wellhead and install dry hole marker. Clean location as per regulated.

Wellbore schematics attached

Mule Deer ATU Federal Com 1 Proposed

Sec-TWN-RNG: Sec. 11-21S-21E
 FOOTAGES: 1559'FSL & 1438'FWL
 API: 30-015-30985
 GL: 4661
 KB:

7th Plug

6th Plug

5th Plug

4th Plug

3rd Plug

2nd Plug

1st Plug

Existing Cisco Perfs: 5986 - 6168'

Existing CIBP at 7022' w/ 35' cmt

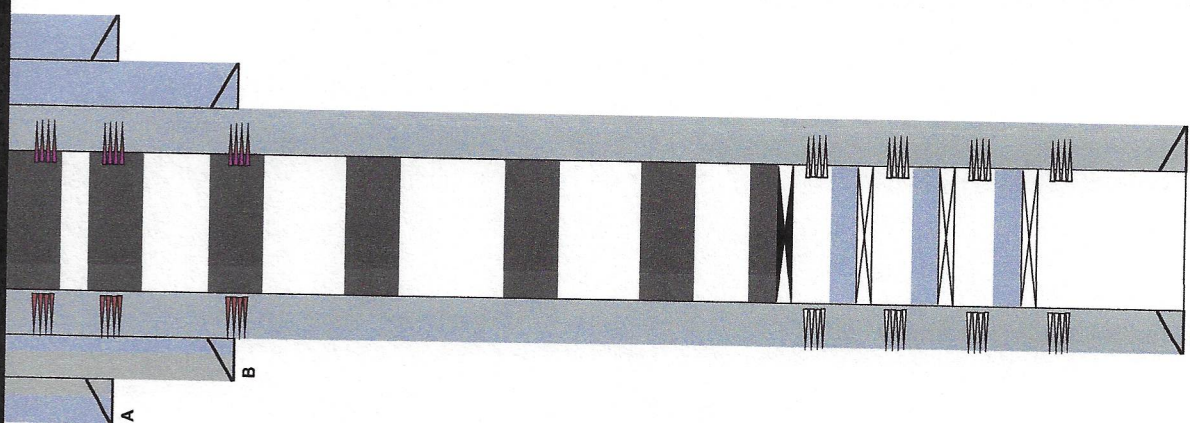
Existing Canyon Perfs: 7088' - 7094'

Existing CIBP at 7700' w/ 35' cmt

Existing Atoka Perfs: 7751' - 7807'

Existing CIBP at 7920' w/ 35' cmt

Existing Morrow Perfs: 7941' - 7946'



CASING DETAIL

#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	17 1/2	13 3/8	48	H-40	0	310	857	Circ	
B	12 1/4	9 5/8	36	J-55	0	2,023	1875	Circ	
C	8 3/4	5 1/2	17	S-95,J-55	0	8,370	1810	Circ	

FORMATION TOPS

Formation	Top	Formation	Top	Formation	Top
Glorieta	1962	Cisco	5872	L Morrow	8056
Yeso	2066	Canyon	6526	Chester	8284
Tubb	2794	Strawn	7174		
Abo	3396	Atoka	7612		
Wolfcamp	4567	Morrow	7916		

TUBING DETAIL

#	Joints	Description	Length	OD	ID	Grade	Wt (lb/ft)	Top (ftKB)	Btm (ftKB)
		2-7/8" Tubing and packer						5,928	

PLUGS

#	SX	Class	Top	Bottom	Δ	Notes	Tag
1	4	C	5,901	5,936	35	Cisco Perfs	N
2	25	C	4,441	4,693	252	Wolfcamp Top	N
3	25	C	3,270	3,522	252	Abo Top	N
4	25	C	2,668	2,920	252	Tubb Top	N
5	25	C	1,864	2,116	252	Yeso Top, Glorieta Top & Int. Csg. Shoe	Y
6	25	C	184	436	252	Sur. Csg. Shoe	Y
7	10	C	0	100	100	Surface Plug	Y

PERFORATION DETAIL

Formation	Top	Bottom
Morrow	7,941	7,946
Atoka	7,751	7,807
Canyon	7,088	7,094
Cisco	5,986	6,168

ADDITIONAL DETAIL

Existing CIBP at 7022' w/ 35' cmt
Existing CIBP at 7700' w/ 35' cmt
Existing CIBP at 7920' w/ 35' cmt

PBTD: 7,022 MD

TD: 8,370 MD

Prepared by: KJP

Mule Deer ATU Federal Com 1 Current

Sec-TWN-RNG: Sec. 11-21S-21E
 FOOTAGES: 1559'FSL & 1438'FWL
 API: 30-015-30985
 GL: 4661
 KB:

CASING DETAIL									
#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	17 1/2	13 3/8	48	H-40	0	310	857	Circ	
B	12 1/4	9 5/8	36	J-55	0	2,023	1875	Circ	
C	8 3/4	5 1/2	17	S-95,J-55	0	8,370	1810	Circ	

FORMATION TOPS

Formation	Top	Formation	Top
Glorieta	1962	Chester	8284
Yeso	2066		
Tubb	2794		
Abo	3396		
Wolfcamp	4567		
Cisco	5872		
Canyon	6526		
Strawn	7174		
Atoka	7612		
Morrow	7916		
L Morrow	8056		

#	Joints	Description	Length	OD	ID	Grade	Wt (lb/ft)	Top (ftKB)	Btm (ftKB)
		2-7/8" Tubing and packer						5,928	

CIBP at 7920 with 35' cement

CIBP at 7700 with 35' cement

CIBP at 7022 with 35' cement

Perforation Detail

Formation	Top	Bottom	Treatment
Morrow	7,941	7,946	Acidize w/1000g 7% IC MSA + 1000 scf/bbl N2
Atoka	7,751	7,807	Acidize w/1500g 15% IC HCL with ball sealers
Canyon	7,088	7,094	Acidize w/1500g 15% IC HCL with ball sealers
Cisco	5,986	6,168	Acidize w/25,000g gelled 15% IC HCL
			Acidize 6138-6168 w/538g 15% IC HCL
			Acidize 6094-6168 w/1462g 15% IC HCL w/46 sealers
			Acidize 5986-6052 w/1000g 15% IC HCL w/40 sealers

PBTD: 7,022 MD
 TD: 8,370 MD

Prepared by: TH

**BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972**

**Permanent Abandonment of Federal Wells
Conditions of Approval**

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within ninety (90) days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.**

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
620 E. Greene St.
Carlsbad, New Mexico 88220-6292
www.blm.gov/nm



In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its pre-disturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines (Contact service companies, allowing plenty of time to have the risers and power lines and poles removed prior to reclamation, don't wait till the last day and try to get them to remove infrastructure). Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you

have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos
Supervisory Petroleum Engineering Tech
575-234-5909 (Office), 575-361-2648 (Cell)

Arthur Arias
Environmental Protection Specialist
575-234-6230

Crisha Morgan
Environmental Protection Specialist
575-234-5987

Melissa Horn
Environmental Protection Specialist
575-234-5951

Kelsey Wade
Environmental Protection Specialist
575-234-2220

Trishia Bad Bear, Hobbs Field Station
Natural Resource Specialist
575-393-3612

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 41977

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 41977
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
gcordero	None	8/20/2021