Sundry Print Repor

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

COM

Well Name: DAMA DORADA 1/3 FED Well Location: T20S / R27E / SEC 1 /

SESE / 32.5978772 / -104.2265751

County or Parish/State: EDDY /

Well Number: 626H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM4986 **Unit or CA Name: Unit or CA Number:** 

**US Well Number: 3001555788** Operator: MEWBOURNE OIL

**COMPANY** 

# **Notice of Intent**

**Sundry ID: 2828210** 

Type of Submission: Notice of Intent Type of Action: APD Change

Date Sundry Submitted: 12/18/2024 Time Sundry Submitted: 02:03

Date proposed operation will begin: 12/30/2024

Procedure Description: Mewbourne requests the intermediate csg string be changed from 7" to 7 5/8" for the Dama Dorada 1/3 Fed Com 626H (API 3001555788). Attached csg & cmt assumptions corresponding to the csg change requested.

# **NOI Attachments**

# **Procedure Description**

Dama\_Dorada\_1\_3\_Fed\_Com\_626H\_CsgAssumptions\_20241227134338.pdf

# **Conditions of Approval**

# **Additional**

Dama\_Dorada\_1\_3\_Fed\_Com\_626H\_CsgAssumptions\_20250114153534.pdf

DAMA\_DORADA\_1\_3\_FED\_COM\_626H\_Sundry\_2828210\_COA\_20250114153534.pdf

eived by OCD: 1/17/2025 10:19:55 AM Well Name: DAMA DORADA 1/3 FED

COM

Well Location: T20S / R27E / SEC 1 / SESE / 32.5978772 / -104.2265751

County or Parish/State: Page 2 of

Well Number: 626H

Type of Well: OIL WELL

**Allottee or Tribe Name:** 

Lease Number: NMNM4986

**Unit or CA Name:** 

**Unit or CA Number:** 

**US Well Number: 3001555788** 

Operator: MEWBOURNE OIL

**COMPANY** 

# **Operator**

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

Signed on: DEC 27, 2024 01:43 PM **Operator Electronic Signature: RYAN MCDANIEL** 

Name: MEWBOURNE OIL COMPANY

Title: Engineer

Street Address: 4801 BUSINESS PARK BLVD

City: HOBBS State: NM

Phone: (575) 393-5905

Email address: RYANMCDANIEL@MEWBOURNE.COM

# **Field**

**Representative Name:** 

**Street Address:** 

City:

State:

Zip:

Phone:

**Email address:** 

# **BLM Point of Contact**

**BLM POC Name: CHRISTOPHER WALLS** 

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5752342234

BLM POC Email Address: cwalls@blm.gov

**Disposition:** Approved Signature: Chris Walls

**Disposition Date:** 01/17/2025

Page 2 of 2

Form 3160-5 (June 2019)

# UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

BURI	EAU OF LAND MANAGEMENT	Lease Serial No.     If Indian, Allottee or Tribe Name			
Do not use this f	OTICES AND REPORTS ON Worm for proposals to drill or to Jse Form 3160-3 (APD) for suc				
SUBMIT IN 1	<b>TRIPLICATE</b> - Other instructions on pag	7. If Unit of CA/Agreement, Name and/or No.			
1. Type of Well  Oil Well  Gas W	/ell Other	8. Well Name and No.			
2. Name of Operator			9. API Well No.		
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or Explora	atory Area	
4. Location of Well (Footage, Sec., T.,R	.,M., or Survey Description)		11. Country or Parish, State		
12. CHE	CK THE APPROPRIATE BOX(ES) TO IN	DICATE NATURE O	DF NOTICE, REPORT OR OT	HER DATA	
TYPE OF SUBMISSION		TYPE	E OF ACTION		
Notice of Intent	Acidize Deep Alter Casing Hydr	en [raulic Fracturing [	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity	
Subsequent Report		Construction	Recomplete	Other	
Final Abandonment Notice		and Abandon Back	Temporarily Abandon Water Disposal		
is ready for final inspection.)	true and correct. Name (Printed/Typed)	s, including reciamat	non, have been completed and	the operator has determined that the site	
4. I hereby certify that the foregoing is	true and correct. Name (Printed/Typea)	Title			
Signature		Date			
	THE SPACE FOR FED	ERAL OR STA	TE OFICE USE		
Approved by		Title		Date	
	ned. Approval of this notice does not warran quitable title to those rights in the subject led duct operations thereon.				
	3 U.S.C Section 1212, make it a crime for an		and willfully to make to any d	lepartment or agency of the United States	

(Instructions on page 2)

#### **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

# SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

#### **NOTICES**

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

# **Additional Information**

### **Location of Well**

0. SHL: SESE / 950 FSL / 245 FEL / TWSP: 20S / RANGE: 27E / SECTION: 1 / LAT: 32.5978772 / LONG: -104.2265751 ( TVD: 0 feet, MD: 0 feet )

PPP: NENE / 1820 FSL / 100 FEL / TWSP: 20S / RANGE: 27E / SECTION: 1 / LAT: 32.600273 / LONG: -104.2260921 ( TVD: 8090 feet, MD: 8200 feet )

PPP: NESE / 1820 FSL / 0 FEL / TWSP: 20S / RANGE: 27E / SECTION: 3 / LAT: 32.6004278 / LONG: -104.2600389 ( TVD: 8231 feet, MD: 13465 feet )

PPP: NESE / 1820 FSL / 0 FEL / TWSP: 20S / RANGE: 27E / SECTION: 2 / LAT: 32.6003507 / LONG: -104.248872 ( TVD: 8301 feet, MD: 10828 feet )

PPP: NESE / 4820 FSL / 2630 FWL / TWSP: 20S / RANGE: 27E / SECTION: 1 / LAT: 32.6003114 / LONG: -104.2343281 ( TVD: 8355 feet, MD: 8774 feet )

BHL: NWSW / 1820 FSL / 100 FWL / TWSP: 20S / RANGE: 27E / SECTION: 3 / LAT: 32.6005012 / LONG: -104.2769026 ( TVD: 7954 feet, MD: 23944 feet )

BHL: 1820' FSL 100' FWL (Sec 3)

									1.6 Dry	1.6 Dry
Casing Program Design A						BLM Minimum Safety Factors	1.125	1.0	1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	450'	450'	13.375" 48# H40 STC	3.83	8.60	14.91	25.05
Int	12.25"	0'	0'	2850'	2850'	9.625" 36# J55 LTC	1.34	2.33	4.42	5.50
Production	8.75"	0'	0'	7874'	7779'	7 5/8" 29.7# HCP110 GBCD	1.88	2.49	3.29	4.02
Production	8.5"	7874'	7779'	23944'	8355'	5.5" 20# P110 LTC	2.13	2.42	1.14	1.34

Centent i rogiani									
Casing		# Sacks	Wt. lb/gal	Yield ft <sup>3</sup> /sack	TOC/BOC	Volume ft <sup>3</sup>	% Excess	Slurry Description	
13,375 in	LEAD	170	12.5	2.12	0' - 261'	370	100%	Class C: Salt, Gel, Extender, LCM	
13.575 III	TAIL	200	14.8	1.34	261' - 450'	268	100%	Class C: Retarder	
9.625 in	LEAD	400	12.5	2.12	0' - 2167'	850	25%	Class C: Salt, Gel, Extender, LCM	
9.025 III	TAIL	200	14.8	1.34	2167' - 2850'	268	25%	Class C: Retarder	
	LEAD	610	12.5	2.12	2650' - 7895'	1300		Class C: Salt, Gel, Extender, LCM, Defoamer	
7.625 in - 5.5 in	TAIL	2150	13.5	1.85	7895' - 23944'	3978	25%	Class H: Retarder, Fluid Loss, Defoamer	

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.4 - 8.6	Fresh Water
450' - 2850'	10-10.2	Brine
2850' - 7874'	8.6-9.4	Cut-Brine
7874' - 23944'	9.5 - 12	OBM

Geolog	
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Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)	2895'	Oil/Natural Gas
Salt Top			Bell Canyon		
Salt Base	599'	Oil/Natural Gas	Cherry Canyon		
Yates	730'	Oil/Natural Gas	Manzanita Marker		
Seven Rivers	1208'	Oil/Natural Gas	Basal Brushy Canyon	3457'	Oil/Natural Gas
Queen	1606'	Oil/Natural Gas	Bone Spring	4033'	Oil/Natural Gas
Capitan			1st Bone Spring	6055'	Oil/Natural Gas
Grayburg	1994'	None	2nd Bone Spring	7000'	Oil/Natural Gas
San Andres	2363'	Oil/Natural Gas	3rd Bone Spring	8130'	Oil/Natural Gas
Glorieta			Wolfcamp	8530'	Oil/Natural Gas

# $All \ casing \ strings \ will \ be \ tested \ in \ accordance \ with \ 43 \ CFR \ Part \ 3170 \ Subpart \ 3172. \ Must \ have \ table \ for \ contingency \ casing.$

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above easing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, easing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
Is wen notated might Cave Mass:  If yes, are there two strings cemented to surface?	- 1
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

BHL: 1820' FSL 100' FWL (Sec 3)

Casing Program Design B BLM Minimum						BLM Minimum Safety Factors 1	1.125	1.0	1.6 Dry	1.6 Dry
						DEM Millimum Salety Factors	1.125		1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size SF Collapse	GE G II	SF Burst	SF Jt Tension	SF Body
String	noie Size	Top MD	TOP I V D	Bot NID	BOLIVD		Sr Durst	Sr Jt Tension	Tension	
Surface	17.5"	0'	0'	450'	450'	13.375" 48# H40 STC	3.83	8.60	14.91	25.05
Int	12.25"	0'	0'	2850'	2850'	9.625" 36# J55 LTC	1.34	2.33	4.42	5.50
Production	8.75"	0'	0'	8774'	8355'	7 5/8" 29.7# HCP110 GBCD	1.75	2.32	2.95	3.61
Production	8.5"	8774'	8355'	23944'	8355'	5.5" 20# P110 LTC	2.13	2.42	1.14	1.34

Design B - Cement Program

zeolgh z Cement i regrum										
Casing		# Sacks	Wt. lb/gal	Yield ft <sup>3</sup> /sack	TOC/BOC	Volume ft <sup>3</sup>	% Excess	Slurry Description		
13.375 in	LEAD	170	12.5	2.12	0' - 261'	370	100%	Class C: Salt, Gel, Extender, LCM		
13.373 III	TAIL	200	14.8	1.34	261' - 450'	268	100%	Class C: Retarder		
9.625 in	LEAD	400	12.5	2.12	0' - 2167'	850	25%	Class C: Salt, Gel, Extender, LCM		
9.025 III	TAIL	200	14.8	1.34	2167' - 2850'	268	2,370	Class C: Retarder		
	LEAD	690	12.5	2.12	2650' - 8748'	1470		Class C: Salt, Gel, Extender, LCM, Defoamer		
7.625 in - 5.5 in	TAIL	1980	13.5	1.85	8748' - 23944'	3663	25%	Class H: Retarder, Fluid Loss, Defoamer		

Design B - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.4 - 8.6	Fresh Water
450' - 2850'	10-10.2	Brine
2850' - 8774'	8.6-9.4	Cut-Brine
8774' - 23944'	9.5 - 12	OBM

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)	2895'	Oil/Natural Gas
Salt Top			Bell Canyon		
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Yates	730'	Oil/Natural Gas	Manzanita Marker		
Seven Rivers	1208'	Oil/Natural Gas	Basal Brushy Canyon	3457'	Oil/Natural Gas
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Capitan			1st Bone Spring	6055'	Oil/Natural Gas
Grayburg	1994'	None	2nd Bone Spring	7000'	Oil/Natural Gas
San Andres	2363'	Oil/Natural Gas	3rd Bone Spring	8130'	Oil/Natural Gas
Glorieta			Wolfcamp	8530'	Oil/Natural Gas

# All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172. Must have table for contingency casing.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	-
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	-

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** MEWBOURNE OIL COMPANY

**WELL NAME & NO.:** DAMA DORADA 1/3 FED COM 626H

**APD ID:** 10400098532

**LOCATION:** Section 1, T20S, R27E. NMP.

COUNTY: | Eddy County, New Mexico |

COA

$H_2S$	0	No	•	Yes
Potash /	None	Secretary	O R-111-Q	☐ Open Annulus
WIPP				□ WIPP
Cave / Karst	O Low	Medium	O High	Critical
Wellhead	<ul><li>Conventional</li></ul>	• Multibowl	O Both	<ul><li>Diverter</li></ul>
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	☐ DV Tool
Special Req	☐ Capitan Reef	☐ Water Disposal	✓ COM	☐ Unit
Waste Prev.	Self-Certification	O Waste Min. Plan	• APD Submitted prior to 06/10/202	
Additional	▼ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	Break Testing
Language	$\square$ Four-String	Offline Cementing	☐ Fluid-Filled	

# SEE ORIGINAL COA FOR ALL OTHER REQUIREMENTS.

# A. CASING DESIGN

# **Primary Casing Program**

- 1. The 13-3/8 inch surface casing shall be set at approximately 450 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered set casing at least 25 ft. above the salt.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u> hours or 500 psi compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is

greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 2,850 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - **Cement to surface.** If cement does not circulate, see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave/Karst**.

**Note:** Excess cement is below the BLM's recommendation of 25%. More cement might be needed.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.
- 3. The 7-5/8 x 5-1/2 inch tapered production casing shall be set at approximately 23,944 ft. (8,355 ft. TVD). Hole and casing size change at approximately 7,874 ft. The minimum required fill of cement behind the tapered production casing is:
  - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

# **Alternate Casing Program**

- 1. The 13-3/8 inch surface casing shall be set at approximately 450 ft. (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered set casing at least 25 ft. above the salt.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u> hours or 500 psi compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

- 2. The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 2,850 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - **Cement to surface.** If cement does not circulate, see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave/Karst**.

**Note:** Excess cement is below the BLM's recommendation of 25%. More cement might be needed.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.
- 3. The 7-5/8 x 5-1/2 inch tapered production casing shall be set at approximately 23,944 ft. (8,355 ft. TVD). Hole and casing size change at approximately 8,774 ft. The minimum required fill of cement behind the tapered production casing is:
  - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

**Note:** The production casing must be kept fluid-filled to meet the BLM's minimum collapse design requirements.

# **Offline Cementing**

Operator has been (**Approved**) to pump the proposed cement program offline in the **Surface and intermediate(s) intervals**. Offline cementing should commence within 24 hours of landing the casing for the interval. Notify the BLM 4hrs prior to cementing offline at **Eddy County:** 575-361-2822.

## **B. PRESSURE CONTROL**

- 1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed a **multi-bowl wellhead** assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000** (**5M**) psi. The BOP/BOPE and annular preventer shall be pressure-tested in accordance with **title 43 CFR 3172 and API Standard 53.** 
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in the **title** 43 CFR 3172.6(b)(9) must be followed.

# **BOPE Break Testing Variance (Approved)**

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests
- As a minimum, a full BOPE test shall be performed at **21**-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR part 3170 Subpart 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

# C. SPECIAL REQUIREMENT (S)

## **Communitization Agreement**

• The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

# **GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

# **Contact Eddy County Petroleum Engineering Inspection Staff:**

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV**; (575) 361-2822.

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the doghouse or stairway area.
- **3.** For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from

spacer and drilling mud. The results should be documented in the driller's log and daily reports.

# A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- **4.** Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- **5.** No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- **6.** On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- **7.** If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which

- have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- **8.** Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

### **B. PRESSURE CONTROL**

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- **3.** 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- **4.** If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - iii. Manufacturer representative shall install the test plug for the initial BOP
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- **5.** The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four

hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (Only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.

# C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

# D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crewintensive operations.

### SA 01/14/2025

SHL: 950' FSL 245' FEL (Sec 1) BHL: 1820' FSL 100' FWL (Sec 3)

Casing Program Design A					BLM Minimum Safety Factors	1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet	
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	450'	450'	13.375" 48# H40 STC	3.83	8.60	14.91	25.05
Int	12.25"	0'	0'	2850'	2850'	9.625" 36# J55 LTC	1.34	2.33	4.42	5.50
Production	8.75"	0'	0'	7874'	7779'	7 5/8" 29.7# P110	1.40	2.49	3.29	4.02
Production	8.5"	7874'	7779'	23944'	8355'	5.5" 20# P110 LTC	2.13	2.42	1.14	1.34

Cement Program

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Casing		# Sacks	Wt. lb/gal	Yield ft <sup>3</sup> /sack	TOC/BOC	Volume ft <sup>3</sup>	% Excess	Slurry Description
13,375 in	LEAD	170	12.5	2.12	0' - 261'	370	100%	Class C: Salt, Gel, Extender, LCM
15.575 III	TAIL	200	14.8	1.34	261' - 450'	268	100%	Class C: Retarder
9.625 in	LEAD	400	12.5	2.12	0' - 2167'	850	25%	Class C: Salt, Gel, Extender, LCM
9.025 III	TAIL	200	14.8	1.34	2167' - 2850'	268	25%	Class C: Retarder
7.625 in - 5.5 in	LEAD	610	12.5	2.12	2650' - 7895'	1300	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
7.025 III - 3.5 III	TAIL	2150	13.5	1.85	7895' - 23944'	3978	25%	Class H: Retarder, Fluid Loss, Defoamer

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.4 - 8.6	Fresh Water
450' - 2850'	10-10.2	Brine
2850' - 7874'	8.6-9.4	Cut-Brine
7874' - 23944'	9.5 - 12	OBM

Geology

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)	2895'	Oil/Natural Gas
Salt Top			Bell Canyon		
Salt Base	599'	Oil/Natural Gas	Cherry Canyon		
Yates	730'	Oil/Natural Gas	Manzanita Marker		
Seven Rivers	1208'	Oil/Natural Gas	Basal Brushy Canyon	3457'	Oil/Natural Gas
Queen	1606'	Oil/Natural Gas	Bone Spring	4033'	Oil/Natural Gas
Capitan			1st Bone Spring	6055'	Oil/Natural Gas
Grayburg	1994'	None	2nd Bone Spring	7000'	Oil/Natural Gas
San Andres	2363'	Oil/Natural Gas	3rd Bone Spring	8130'	Oil/Natural Gas
Glorieta			Wolfcamp	8530'	Oil/Natural Gas

# All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172. Must have table for contingency casing.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	
If yes, are there three strings cemented to surface?	N

BHL: 1820' FSL 100' FWL (Sec 3)

Casing Program Design B					BLM Minimum Safety Factors	1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet	
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	450'	450'	13.375" 48# H40 STC	3.83	8.60	14.91	25.05
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Production	8.75"	0'	0'	8774'	8355'	7 5/8" 29.7# P110	1.31	2.32	2.95	3.61
Production	8.5"	8774'	8355'	23944'	8355'	5.5" 20# P110 LTC	2.13	2.42	1.14	1.34

Design B - Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft <sup>3</sup> /sack	TOC/BOC	Volume ft <sup>3</sup>	% Excess	Slurry Description
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9.625 in	LEAD	400	12.5	2.12	0' - 2167'	850	25%	Class C: Salt, Gel, Extender, LCM
9.023 III	TAIL	200	14.8	1.34	2167' - 2850'	268	25%	Class C: Retarder
7.625 in - 5.5 in	LEAD	690	12.5	2.12	2650' - 8748'	1470	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
7.023 III - 5.3 III	TAIL	1980	13.5	1.85	8748' - 23944'	3663		Class H: Retarder, Fluid Loss, Defoamer

Design B - Mud Program

Mud Wt	Mud Type
8.4 - 8.6	Fresh Water
10-10.2	Brine
8.6-9.4	Cut-Brine
9.5 - 12	OBM
	8.4 - 8.6 10-10.2 8.6-9.4

Geol	log

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
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Is well within the designated 4 string boundary.	N
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If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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

CONDITIONS

Action 421960

#### **CONDITIONS**

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	421960
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

### CONDITIONS

Created By	Condition	Condition Date
dmcclure	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	9/3/2025
dmcclure	PFAS COA - "No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations."	9/3/2025
dmcclure	Operator is approved to upsize the upper portion of the production casing to 7-5/8.	9/3/2025