

Well Name: SANTA MARIA 31/36 FED COM	Well Location: T20S / R27E / SEC 32 / SWNW / 32.5305524 / -104.3095761	County or Parish/State: EDDY / NM
Well Number: 626H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM19431	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: MEWBOURNE OIL COMPANY	

Notice of Intent

Sundry ID: 2801672

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 07/18/2024

Time Sundry Submitted: 07:28

Date proposed operation will begin: 07/19/2024

Procedure Description: Mewbourne Oil Company request that the following change be made to the Santa Maria 31/36 Fed Com #626H (API #30-015-55213): 1. Change well name f/ Santa Maria 31/36 Fed Com #626H (API #30-015-55213) to Santa Maria 31/36 Fed Com #626Y. 2. Request to skid of original wellbore Santa Maria 31/36 Fed Com #626H f/ 2475 FNL & 800 FWL (32) to 2481 FNL & 800 FWL (32) 3. Attached 3160-003, Plat, Drlg Program, Dir Plan corresponding with new SHL. 4. Reference Sundry ID: 2801667 for P&A of Santa Maria 31/36 Fed Com #626Y.

NOI Attachments

Procedure Description

Santa_Maria_31_36_Fed_Com_626H_MOC_Dir_Plan_20240718072757.pdf

Santa_Maria_31_36_Fed_Com_626H_Drlg_Program_20240718072746.pdf

SANTA_MARIA_31_36_FED_COM_626H_Plat_20240718072719.pdf

Santa_Maria_31_36_Fed_Com_626H_3160_003_20240718072620.pdf

Santa_Maria_31_36_Fed_Com_626H_Skid_Sundry_20240718072558.pdf

Well Name: SANTA MARIA 31/36 FED COM

Well Location: T20S / R27E / SEC 32 / SWNW / 32.5305524 / -104.3095761

County or Parish/State: EDDY / NM

Well Number: 626H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM19431

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: MEWBOURNE OIL COMPANY

Conditions of Approval

Specialist Review

Santa_Maria_31_36_Fed_Com_626H_COA_20240718103936.pdf

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

Operator Electronic Signature: CONNER WHITLEY

Signed on: JUL 18, 2024 07:28 AM

Name: MEWBOURNE OIL COMPANY

Title: ENGINEER

Street Address: 901 W TAOS ST

City: HOBBS

State: NM

Phone: (806) 202-5974

Email address: CWHITLEY@MEWBOURNE.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CODY LAYTON

BLM POC Title: Assistant Field Manager Lands & Minerals

BLM POC Phone: 5752345959

BLM POC Email Address: clayton@blm.gov

Disposition: Approved

Disposition Date: 07/19/2024

Signature: Cody R. Layton

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well

Oil Well Gas Well 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 Exploratory Area

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)

11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

(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, 3162.3-3, 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: SWNW / 2475 FNL / 800 FWL / TWSP: 20S / RANGE: 27E / SECTION: 32 / LAT: 32.5305524 / LONG: -104.3095761 (TVD: 0 feet, MD: 0 feet)

PPP: NWSE / 1980 FSL / 1320 FEL / TWSP: 20S / RANGE: 28E / SECTION: 31 / LAT: 32.5280398 / LONG: -104.3164066 (TVD: 7841 feet, MD: 9512 feet)

PPP: NESE / 1980 FSL / 100 FEL / TWSP: 20S / RANGE: 27E / SECTION: 31 / LAT: 32.5280394 / LONG: -104.3124464 (TVD: 7883 feet, MD: 8291 feet)

BHL: NWSW / 1980 FSL / 100 FWL / TWSP: 20S / RANGE: 26E / SECTION: 36 / LAT: 32.5280418 / LONG: -104.3460495 (TVD: 7517 feet, MD: 18655 feet)

CONFIDENTIAL

Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Santa Maria 31/36 Fed Com #626H

Sec 32, T20S, R27E

SHL: 2481' FNL & 800' FWL (Sec 32)

BHL: 1980' FSL & 100' FWL (Sec 36)

Plan: Design #1

Standard Planning Report

17 July, 2024

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Santa Maria 31/36 Fed Com #626H
Company:	Mewbourne Oil Company	TVD Reference:	Well @ 3254.0usft (Original Well)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	Well @ 3254.0usft (Original Well)
Site:	Santa Maria 31/36 Fed Com #626H	North Reference:	Grid
Well:	Sec 32, T20S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 1980' FSL & 100' FWL (Sec 36)		
Design:	Design #1		

Project	Eddy County, New Mexico NAD 83		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Santa Maria 31/36 Fed Com #626H				
Site Position:		Northing:	556,739.40 usft	Latitude:	32.5305330
From:	Map	Easting:	548,658.20 usft	Longitude:	-104.3095794
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	Sec 32, T20S, R27E					
Well Position	+N/-S	0.0 usft	Northing:	556,739.40 usft	Latitude:	32.5305330
	+E/-W	0.0 usft	Easting:	548,658.20 usft	Longitude:	-104.3095794
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,254.0 usft	Ground Level:	3,226.0 usft
Grid Convergence:	0.01 °					

Wellbore	BHL: 1980' FSL & 100' FWL (Sec 36)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.51	60.26	48,342.09509819

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	265.38

Plan Survey Tool Program	Date	7/17/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	18,653.8	Design #1 (BHL: 1980' FSL & 100	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,250.0	0.00	0.00	1,250.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,738.4	9.77	198.89	1,736.0	-39.3	-13.4	2.00	2.00	0.00	198.89	
6,901.2	9.77	198.89	6,824.0	-868.0	-297.0	0.00	0.00	0.00	0.00	
7,389.6	0.00	0.00	7,310.0	-907.3	-310.4	2.00	-2.00	0.00	180.00	KOP: 1980' FSL & 47:
8,310.5	92.03	270.00	7,883.0	-907.3	-904.0	9.99	9.99	0.00	-90.00	
18,653.8	92.03	270.00	7,517.0	-908.0	-11,240.9	0.00	0.00	0.00	0.00	BHL: 1980' FSL & 100

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Santa Maria 31/36 Fed Com #626H
Company:	Mewbourne Oil Company	TVD Reference:	Well @ 3254.0usft (Original Well)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	Well @ 3254.0usft (Original Well)
Site:	Santa Maria 31/36 Fed Com #626H	North Reference:	Grid
Well:	Sec 32, T20S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 1980' FSL & 100' FWL (Sec 36)		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
SHL: 2481' FNL & 800' FWL (Sec 32)										
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,250.0	0.00	0.00	1,250.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	1.00	198.89	1,300.0	-0.4	-0.1	0.2	2.00	2.00	0.00	
1,400.0	3.00	198.89	1,399.9	-3.7	-1.3	1.6	2.00	2.00	0.00	
1,500.0	5.00	198.89	1,499.7	-10.3	-3.5	4.3	2.00	2.00	0.00	
1,600.0	7.00	198.89	1,599.1	-20.2	-6.9	8.5	2.00	2.00	0.00	
1,700.0	9.00	198.89	1,698.2	-33.4	-11.4	14.1	2.00	2.00	0.00	
1,738.4	9.77	198.89	1,736.0	-39.3	-13.4	16.6	2.00	2.00	0.00	
1,800.0	9.77	198.89	1,796.7	-49.2	-16.8	20.7	0.00	0.00	0.00	
1,900.0	9.77	198.89	1,895.3	-65.2	-22.3	27.5	0.00	0.00	0.00	
2,000.0	9.77	198.89	1,993.8	-81.3	-27.8	34.3	0.00	0.00	0.00	
2,100.0	9.77	198.89	2,092.4	-97.3	-33.3	41.0	0.00	0.00	0.00	
2,200.0	9.77	198.89	2,190.9	-113.4	-38.8	47.8	0.00	0.00	0.00	
2,300.0	9.77	198.89	2,289.5	-129.4	-44.3	54.6	0.00	0.00	0.00	
2,400.0	9.77	198.89	2,388.0	-145.5	-49.8	61.3	0.00	0.00	0.00	
2,500.0	9.77	198.89	2,486.6	-161.5	-55.3	68.1	0.00	0.00	0.00	
2,600.0	9.77	198.89	2,585.1	-177.6	-60.8	74.9	0.00	0.00	0.00	
2,700.0	9.77	198.89	2,683.7	-193.6	-66.2	81.6	0.00	0.00	0.00	
2,800.0	9.77	198.89	2,782.2	-209.7	-71.7	88.4	0.00	0.00	0.00	
2,900.0	9.77	198.89	2,880.8	-225.8	-77.2	95.2	0.00	0.00	0.00	
3,000.0	9.77	198.89	2,979.4	-241.8	-82.7	101.9	0.00	0.00	0.00	
3,100.0	9.77	198.89	3,077.9	-257.9	-88.2	108.7	0.00	0.00	0.00	
3,200.0	9.77	198.89	3,176.5	-273.9	-93.7	115.5	0.00	0.00	0.00	
3,300.0	9.77	198.89	3,275.0	-290.0	-99.2	122.2	0.00	0.00	0.00	
3,400.0	9.77	198.89	3,373.6	-306.0	-104.7	129.0	0.00	0.00	0.00	
3,500.0	9.77	198.89	3,472.1	-322.1	-110.2	135.8	0.00	0.00	0.00	
3,600.0	9.77	198.89	3,570.7	-338.1	-115.7	142.5	0.00	0.00	0.00	
3,700.0	9.77	198.89	3,669.2	-354.2	-121.2	149.3	0.00	0.00	0.00	
3,800.0	9.77	198.89	3,767.8	-370.2	-126.7	156.0	0.00	0.00	0.00	
3,900.0	9.77	198.89	3,866.3	-386.3	-132.1	162.8	0.00	0.00	0.00	
4,000.0	9.77	198.89	3,964.9	-402.3	-137.6	169.6	0.00	0.00	0.00	
4,100.0	9.77	198.89	4,063.4	-418.4	-143.1	176.3	0.00	0.00	0.00	
4,200.0	9.77	198.89	4,162.0	-434.4	-148.6	183.1	0.00	0.00	0.00	
4,300.0	9.77	198.89	4,260.5	-450.5	-154.1	189.9	0.00	0.00	0.00	
4,400.0	9.77	198.89	4,359.1	-466.5	-159.6	196.6	0.00	0.00	0.00	
4,500.0	9.77	198.89	4,457.6	-482.6	-165.1	203.4	0.00	0.00	0.00	
4,600.0	9.77	198.89	4,556.2	-498.6	-170.6	210.2	0.00	0.00	0.00	
4,700.0	9.77	198.89	4,654.7	-514.7	-176.1	216.9	0.00	0.00	0.00	
4,800.0	9.77	198.89	4,753.3	-530.7	-181.6	223.7	0.00	0.00	0.00	
4,900.0	9.77	198.89	4,851.8	-546.8	-187.1	230.5	0.00	0.00	0.00	
5,000.0	9.77	198.89	4,950.4	-562.8	-192.6	237.2	0.00	0.00	0.00	

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Santa Maria 31/36 Fed Com #626H
Company:	Mewbourne Oil Company	TVD Reference:	Well @ 3254.0usft (Original Well)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	Well @ 3254.0usft (Original Well)
Site:	Santa Maria 31/36 Fed Com #626H	North Reference:	Grid
Well:	Sec 32, T20S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 1980' FSL & 100' FWL (Sec 36)		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	9.77	198.89	5,048.9	-578.9	-198.0	244.0	0.00	0.00	0.00
5,200.0	9.77	198.89	5,147.5	-594.9	-203.5	250.8	0.00	0.00	0.00
5,300.0	9.77	198.89	5,246.0	-611.0	-209.0	257.5	0.00	0.00	0.00
5,400.0	9.77	198.89	5,344.6	-627.0	-214.5	264.3	0.00	0.00	0.00
5,500.0	9.77	198.89	5,443.1	-643.1	-220.0	271.1	0.00	0.00	0.00
5,600.0	9.77	198.89	5,541.7	-659.1	-225.5	277.8	0.00	0.00	0.00
5,700.0	9.77	198.89	5,640.2	-675.2	-231.0	284.6	0.00	0.00	0.00
5,800.0	9.77	198.89	5,738.8	-691.2	-236.5	291.4	0.00	0.00	0.00
5,900.0	9.77	198.89	5,837.3	-707.3	-242.0	298.1	0.00	0.00	0.00
6,000.0	9.77	198.89	5,935.9	-723.3	-247.5	304.9	0.00	0.00	0.00
6,100.0	9.77	198.89	6,034.4	-739.4	-253.0	311.7	0.00	0.00	0.00
6,200.0	9.77	198.89	6,133.0	-755.5	-258.5	318.4	0.00	0.00	0.00
6,300.0	9.77	198.89	6,231.5	-771.5	-263.9	325.2	0.00	0.00	0.00
6,400.0	9.77	198.89	6,330.1	-787.6	-269.4	332.0	0.00	0.00	0.00
6,500.0	9.77	198.89	6,428.6	-803.6	-274.9	338.7	0.00	0.00	0.00
6,600.0	9.77	198.89	6,527.2	-819.7	-280.4	345.5	0.00	0.00	0.00
6,700.0	9.77	198.89	6,625.7	-835.7	-285.9	352.3	0.00	0.00	0.00
6,800.0	9.77	198.89	6,724.3	-851.8	-291.4	359.0	0.00	0.00	0.00
6,901.2	9.77	198.89	6,824.0	-868.0	-297.0	365.9	0.00	0.00	0.00
7,000.0	7.79	198.89	6,921.6	-882.3	-301.8	371.9	2.00	-2.00	0.00
7,100.0	5.79	198.89	7,020.9	-893.5	-305.7	376.6	2.00	-2.00	0.00
7,200.0	3.79	198.89	7,120.6	-901.4	-308.4	379.9	2.00	-2.00	0.00
7,300.0	1.79	198.89	7,220.5	-906.0	-309.9	381.9	2.00	-2.00	0.00
7,389.6	0.00	0.00	7,310.0	-907.3	-310.4	382.4	2.00	-2.00	0.00
KOP: 1980' FSL & 473' FWL (Sec 32)									
7,400.0	1.04	270.00	7,320.4	-907.3	-310.5	382.5	9.99	9.99	0.00
7,450.0	6.04	270.00	7,370.3	-907.3	-313.6	385.6	9.99	9.99	0.00
7,500.0	11.03	270.00	7,419.8	-907.3	-321.0	393.0	9.99	9.99	0.00
7,550.0	16.03	270.00	7,468.4	-907.3	-332.7	404.7	9.99	9.99	0.00
7,600.0	21.03	270.00	7,515.7	-907.3	-348.6	420.5	9.99	9.99	0.00
7,650.0	26.02	270.00	7,561.6	-907.3	-368.5	440.4	9.99	9.99	0.00
7,700.0	31.02	270.00	7,605.5	-907.3	-392.4	464.2	9.99	9.99	0.00
7,750.0	36.02	270.00	7,647.2	-907.3	-420.0	491.7	9.99	9.99	0.00
7,800.0	41.01	270.00	7,686.3	-907.3	-451.1	522.7	9.99	9.99	0.00
7,850.0	46.01	270.00	7,722.5	-907.3	-485.5	557.0	9.99	9.99	0.00
7,900.0	51.01	270.00	7,755.6	-907.3	-523.0	594.3	9.99	9.99	0.00
7,950.0	56.00	270.00	7,785.4	-907.3	-563.2	634.4	9.99	9.99	0.00
8,000.0	61.00	270.00	7,811.5	-907.3	-605.8	676.9	9.99	9.99	0.00
8,050.0	66.00	270.00	7,833.8	-907.3	-650.5	721.4	9.99	9.99	0.00
8,100.0	71.00	270.00	7,852.1	-907.3	-697.0	767.8	9.99	9.99	0.00
8,150.0	75.99	270.00	7,866.3	-907.3	-744.9	815.6	9.99	9.99	0.00
8,200.0	80.99	270.00	7,876.3	-907.3	-793.9	864.4	9.99	9.99	0.00
8,250.0	85.99	270.00	7,882.0	-907.3	-843.6	913.9	9.99	9.99	0.00
8,289.9	89.97	270.00	7,883.4	-907.3	-883.4	953.6	9.99	9.99	0.00
FTP/LP: 1980' FSL & 100' FEL (Sec 31)									
8,300.0	90.98	270.00	7,883.3	-907.3	-893.5	963.7	9.99	9.99	0.00
8,310.5	92.03	270.00	7,883.0	-907.3	-904.0	974.1	9.99	9.99	0.00
8,400.0	92.03	270.00	7,879.8	-907.3	-993.5	1,063.3	0.00	0.00	0.00
8,500.0	92.03	270.00	7,876.3	-907.4	-1,093.4	1,162.9	0.00	0.00	0.00
8,600.0	92.03	270.00	7,872.8	-907.4	-1,193.4	1,262.5	0.00	0.00	0.00
8,700.0	92.03	270.00	7,869.2	-907.4	-1,293.3	1,362.2	0.00	0.00	0.00
8,800.0	92.03	270.00	7,865.7	-907.4	-1,393.2	1,461.8	0.00	0.00	0.00
8,900.0	92.03	270.00	7,862.1	-907.4	-1,493.2	1,561.4	0.00	0.00	0.00
9,000.0	92.03	270.00	7,858.6	-907.4	-1,593.1	1,661.0	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Santa Maria 31/36 Fed Com #626H
Company:	Mewbourne Oil Company	TVD Reference:	Well @ 3254.0usft (Original Well)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	Well @ 3254.0usft (Original Well)
Site:	Santa Maria 31/36 Fed Com #626H	North Reference:	Grid
Well:	Sec 32, T20S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 1980' FSL & 100' FWL (Sec 36)		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,100.0	92.03	270.00	7,855.1	-907.4	-1,693.1	1,760.6	0.00	0.00	0.00
9,200.0	92.03	270.00	7,851.5	-907.4	-1,793.0	1,860.2	0.00	0.00	0.00
9,300.0	92.03	270.00	7,848.0	-907.4	-1,892.9	1,959.8	0.00	0.00	0.00
9,400.0	92.03	270.00	7,844.4	-907.4	-1,992.9	2,059.4	0.00	0.00	0.00
9,500.0	92.03	270.00	7,840.9	-907.4	-2,092.8	2,159.1	0.00	0.00	0.00
9,511.1	92.03	270.00	7,840.5	-907.4	-2,103.9	2,170.1	0.00	0.00	0.00
PPP2: 1980' FSL & 1320' FEL (Sec 31)									
9,600.0	92.03	270.00	7,837.4	-907.4	-2,192.7	2,258.7	0.00	0.00	0.00
9,700.0	92.03	270.00	7,833.8	-907.4	-2,292.7	2,358.3	0.00	0.00	0.00
9,800.0	92.03	270.00	7,830.3	-907.4	-2,392.6	2,457.9	0.00	0.00	0.00
9,900.0	92.03	270.00	7,826.8	-907.4	-2,492.5	2,557.5	0.00	0.00	0.00
10,000.0	92.03	270.00	7,823.2	-907.4	-2,592.5	2,657.1	0.00	0.00	0.00
10,100.0	92.03	270.00	7,819.7	-907.5	-2,692.4	2,756.7	0.00	0.00	0.00
10,200.0	92.03	270.00	7,816.1	-907.5	-2,792.4	2,856.4	0.00	0.00	0.00
10,300.0	92.03	270.00	7,812.6	-907.5	-2,892.3	2,956.0	0.00	0.00	0.00
10,400.0	92.03	270.00	7,809.1	-907.5	-2,992.2	3,055.6	0.00	0.00	0.00
10,500.0	92.03	270.00	7,805.5	-907.5	-3,092.2	3,155.2	0.00	0.00	0.00
10,600.0	92.03	270.00	7,802.0	-907.5	-3,192.1	3,254.8	0.00	0.00	0.00
10,700.0	92.03	270.00	7,798.4	-907.5	-3,292.0	3,354.4	0.00	0.00	0.00
10,800.0	92.03	270.00	7,794.9	-907.5	-3,392.0	3,454.0	0.00	0.00	0.00
10,900.0	92.03	270.00	7,791.4	-907.5	-3,491.9	3,553.6	0.00	0.00	0.00
11,000.0	92.03	270.00	7,787.8	-907.5	-3,591.9	3,653.3	0.00	0.00	0.00
11,100.0	92.03	270.00	7,784.3	-907.5	-3,691.8	3,752.9	0.00	0.00	0.00
11,200.0	92.03	270.00	7,780.8	-907.5	-3,791.7	3,852.5	0.00	0.00	0.00
11,300.0	92.03	270.00	7,777.2	-907.5	-3,891.7	3,952.1	0.00	0.00	0.00
11,400.0	92.03	270.00	7,773.7	-907.5	-3,991.6	4,051.7	0.00	0.00	0.00
11,500.0	92.03	270.00	7,770.1	-907.5	-4,091.5	4,151.3	0.00	0.00	0.00
11,600.0	92.03	270.00	7,766.6	-907.5	-4,191.5	4,250.9	0.00	0.00	0.00
11,700.0	92.03	270.00	7,763.1	-907.6	-4,291.4	4,350.6	0.00	0.00	0.00
11,800.0	92.03	270.00	7,759.5	-907.6	-4,391.4	4,450.2	0.00	0.00	0.00
11,900.0	92.03	270.00	7,756.0	-907.6	-4,491.3	4,549.8	0.00	0.00	0.00
12,000.0	92.03	270.00	7,752.4	-907.6	-4,591.2	4,649.4	0.00	0.00	0.00
12,100.0	92.03	270.00	7,748.9	-907.6	-4,691.2	4,749.0	0.00	0.00	0.00
12,200.0	92.03	270.00	7,745.4	-907.6	-4,791.1	4,848.6	0.00	0.00	0.00
12,300.0	92.03	270.00	7,741.8	-907.6	-4,891.0	4,948.2	0.00	0.00	0.00
12,400.0	92.03	270.00	7,738.3	-907.6	-4,991.0	5,047.9	0.00	0.00	0.00
12,500.0	92.03	270.00	7,734.8	-907.6	-5,090.9	5,147.5	0.00	0.00	0.00
12,600.0	92.03	270.00	7,731.2	-907.6	-5,190.9	5,247.1	0.00	0.00	0.00
12,700.0	92.03	270.00	7,727.7	-907.6	-5,290.8	5,346.7	0.00	0.00	0.00
12,800.0	92.03	270.00	7,724.1	-907.6	-5,390.7	5,446.3	0.00	0.00	0.00
12,900.0	92.03	270.00	7,720.6	-907.6	-5,490.7	5,545.9	0.00	0.00	0.00
13,000.0	92.03	270.00	7,717.1	-907.6	-5,590.6	5,645.5	0.00	0.00	0.00
13,100.0	92.03	270.00	7,713.5	-907.6	-5,690.5	5,745.1	0.00	0.00	0.00
13,200.0	92.03	270.00	7,710.0	-907.7	-5,790.5	5,844.8	0.00	0.00	0.00
13,300.0	92.03	270.00	7,706.4	-907.7	-5,890.4	5,944.4	0.00	0.00	0.00
13,400.0	92.03	270.00	7,702.9	-907.7	-5,990.4	6,044.0	0.00	0.00	0.00
13,500.0	92.03	270.00	7,699.4	-907.7	-6,090.3	6,143.6	0.00	0.00	0.00
13,600.0	92.03	270.00	7,695.8	-907.7	-6,190.2	6,243.2	0.00	0.00	0.00
13,700.0	92.03	270.00	7,692.3	-907.7	-6,290.2	6,342.8	0.00	0.00	0.00
13,800.0	92.03	270.00	7,688.8	-907.7	-6,390.1	6,442.4	0.00	0.00	0.00
13,900.0	92.03	270.00	7,685.2	-907.7	-6,490.0	6,542.1	0.00	0.00	0.00
14,000.0	92.03	270.00	7,681.7	-907.7	-6,590.0	6,641.7	0.00	0.00	0.00
14,100.0	92.03	270.00	7,678.1	-907.7	-6,689.9	6,741.3	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Santa Maria 31/36 Fed Com #626H
Company:	Mewbourne Oil Company	TVD Reference:	Well @ 3254.0usft (Original Well)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	Well @ 3254.0usft (Original Well)
Site:	Santa Maria 31/36 Fed Com #626H	North Reference:	Grid
Well:	Sec 32, T20S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 1980' FSL & 100' FWL (Sec 36)		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,200.0	92.03	270.00	7,674.6	-907.7	-6,789.9	6,840.9	0.00	0.00	0.00	
14,300.0	92.03	270.00	7,671.1	-907.7	-6,889.8	6,940.5	0.00	0.00	0.00	
14,400.0	92.03	270.00	7,667.5	-907.7	-6,989.7	7,040.1	0.00	0.00	0.00	
14,500.0	92.03	270.00	7,664.0	-907.7	-7,089.7	7,139.7	0.00	0.00	0.00	
14,600.0	92.03	270.00	7,660.4	-907.7	-7,189.6	7,239.3	0.00	0.00	0.00	
14,700.0	92.03	270.00	7,656.9	-907.7	-7,289.5	7,339.0	0.00	0.00	0.00	
14,800.0	92.03	270.00	7,653.4	-907.8	-7,389.5	7,438.6	0.00	0.00	0.00	
14,900.0	92.03	270.00	7,649.8	-907.8	-7,489.4	7,538.2	0.00	0.00	0.00	
15,000.0	92.03	270.00	7,646.3	-907.8	-7,589.4	7,637.8	0.00	0.00	0.00	
15,100.0	92.03	270.00	7,642.8	-907.8	-7,689.3	7,737.4	0.00	0.00	0.00	
15,200.0	92.03	270.00	7,639.2	-907.8	-7,789.2	7,837.0	0.00	0.00	0.00	
15,300.0	92.03	270.00	7,635.7	-907.8	-7,889.2	7,936.6	0.00	0.00	0.00	
15,400.0	92.03	270.00	7,632.1	-907.8	-7,989.1	8,036.3	0.00	0.00	0.00	
15,500.0	92.03	270.00	7,628.6	-907.8	-8,089.0	8,135.9	0.00	0.00	0.00	
15,600.0	92.03	270.00	7,625.1	-907.8	-8,189.0	8,235.5	0.00	0.00	0.00	
15,700.0	92.03	270.00	7,621.5	-907.8	-8,288.9	8,335.1	0.00	0.00	0.00	
15,800.0	92.03	270.00	7,618.0	-907.8	-8,388.9	8,434.7	0.00	0.00	0.00	
15,900.0	92.03	270.00	7,614.4	-907.8	-8,488.8	8,534.3	0.00	0.00	0.00	
16,000.0	92.03	270.00	7,610.9	-907.8	-8,588.7	8,633.9	0.00	0.00	0.00	
16,100.0	92.03	270.00	7,607.4	-907.8	-8,688.7	8,733.6	0.00	0.00	0.00	
16,200.0	92.03	270.00	7,603.8	-907.8	-8,788.6	8,833.2	0.00	0.00	0.00	
16,300.0	92.03	270.00	7,600.3	-907.8	-8,888.5	8,932.8	0.00	0.00	0.00	
16,400.0	92.03	270.00	7,596.8	-907.9	-8,988.5	9,032.4	0.00	0.00	0.00	
16,500.0	92.03	270.00	7,593.2	-907.9	-9,088.4	9,132.0	0.00	0.00	0.00	
16,600.0	92.03	270.00	7,589.7	-907.9	-9,188.4	9,231.6	0.00	0.00	0.00	
16,700.0	92.03	270.00	7,586.1	-907.9	-9,288.3	9,331.2	0.00	0.00	0.00	
16,800.0	92.03	270.00	7,582.6	-907.9	-9,388.2	9,430.8	0.00	0.00	0.00	
16,900.0	92.03	270.00	7,579.1	-907.9	-9,488.2	9,530.5	0.00	0.00	0.00	
17,000.0	92.03	270.00	7,575.5	-907.9	-9,588.1	9,630.1	0.00	0.00	0.00	
17,100.0	92.03	270.00	7,572.0	-907.9	-9,688.0	9,729.7	0.00	0.00	0.00	
17,200.0	92.03	270.00	7,568.4	-907.9	-9,788.0	9,829.3	0.00	0.00	0.00	
17,300.0	92.03	270.00	7,564.9	-907.9	-9,887.9	9,928.9	0.00	0.00	0.00	
17,400.0	92.03	270.00	7,561.4	-907.9	-9,987.9	10,028.5	0.00	0.00	0.00	
17,500.0	92.03	270.00	7,557.8	-907.9	-10,087.8	10,128.1	0.00	0.00	0.00	
17,600.0	92.03	270.00	7,554.3	-907.9	-10,187.7	10,227.8	0.00	0.00	0.00	
17,700.0	92.03	270.00	7,550.8	-907.9	-10,287.7	10,327.4	0.00	0.00	0.00	
17,800.0	92.03	270.00	7,547.2	-907.9	-10,387.6	10,427.0	0.00	0.00	0.00	
17,900.0	92.03	270.00	7,543.7	-908.0	-10,487.5	10,526.6	0.00	0.00	0.00	
18,000.0	92.03	270.00	7,540.1	-908.0	-10,587.5	10,626.2	0.00	0.00	0.00	
18,100.0	92.03	270.00	7,536.6	-908.0	-10,687.4	10,725.8	0.00	0.00	0.00	
18,200.0	92.03	270.00	7,533.1	-908.0	-10,787.4	10,825.4	0.00	0.00	0.00	
18,300.0	92.03	270.00	7,529.5	-908.0	-10,887.3	10,925.0	0.00	0.00	0.00	
18,400.0	92.03	270.00	7,526.0	-908.0	-10,987.2	11,024.7	0.00	0.00	0.00	
18,500.0	92.03	270.00	7,522.4	-908.0	-11,087.2	11,124.3	0.00	0.00	0.00	
18,600.0	92.03	270.00	7,518.9	-908.0	-11,187.1	11,223.9	0.00	0.00	0.00	
18,653.8	92.03	270.00	7,517.0	-908.0	-11,240.9	11,277.5	0.00	0.00	0.00	
BHL: 1980' FSL & 100' FWL (Sec 36)										

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Santa Maria 31/36 Fed Com #626H
Company:	Mewbourne Oil Company	TVD Reference:	Well @ 3254.0usft (Original Well)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	Well @ 3254.0usft (Original Well)
Site:	Santa Maria 31/36 Fed Com #626H	North Reference:	Grid
Well:	Sec 32, T20S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 1980' FSL & 100' FWL (Sec 36)		
Design:	Design #1		

Design Targets										
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
- Shape										
SHL: 2481' FNL & 800' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	556,739.40	548,658.20	32.5305330	-104.3095794	
KOP: 1980' FSL & 473' F - plan hits target center - Point	0.00	0.00	7,310.0	-907.3	-310.4	555,832.10	548,347.80	32.5280392	-104.3105872	
BHL: 1980' FSL & 100' F - plan hits target center - Point	0.00	360.00	7,517.0	-908.0	-11,240.9	555,831.40	537,417.30	32.5280387	-104.3460530	
PPP2: 1980' FSL & 132' - plan hits target center - Point	0.00	0.00	7,840.5	-907.4	-2,103.9	555,831.99	546,554.30	32.5280398	-104.3164066	
FTP/LP: 1980' FSL & 10' - plan hits target center - Point	0.00	0.00	7,883.4	-907.3	-883.4	555,832.07	547,774.80	32.5280394	-104.3124464	

Mewbourne Oil Company, Santa Maria 31/36 Fed Com 626H

Sec 32, T20S, R27E

SHL: 2481' FNL 800' FWL (Sec 32)

BHL: 1980' FSL 100' FWL (Sec 36)

Well Location GL: 3226'

Point	Calls	Leases	Aliquot	Section	Township	Range	County	Lat	Long	TVD	MD
SHL	SHL: 2481' FNL & 800' FWL (Sec 32)	NMNM 084711	SWNW	32	20S	27E	Eddy	32.5305358	104.3095761	0'	0'
KOP	KOP: 1980' FSL & 473' FWL (Sec 32)	NMNM 0514573	NWSW	32	20S	27E	Eddy	32.5280392	104.3105872	7,310'	7,391'
FTP	FTP: 1980' FSL & 100' FEL (Sec 31)	NMNM 019431	NESE	31	20S	27E	Eddy	32.5280394	104.3124464	7,883'	8,291'
PPP2	PPP2: 1980' FSL & 1320' FEL (Sec 31)	NMNM0400512A	NWSE	31	20S	27E	Eddy	32.5280398	104.3164066	7,841'	9,512'
BHL	BHL: 1980' FSL & 100' FWL (Sec 36)	V053170001	NWSW	36	20S	26E	Eddy	32.5280418	104.3460495	7,517'	18,655'

GEOLOGY

Formation	Est. Top (TVD)	Lithology	Mineral Resources	Formation	Est. Top (TVD)	Lithology	Mineral Resources
Rustler				Yeso			
Castile				Delaware (Lamar)	2270'	Limestone/Dolomite	Oil/Natural Gas
Salt Top				Bell Canyon			
Salt Base				Cherry Canyon			
Yates	380'	Sandstone	Oil/Natural Gas	Manzanita Marker			
Seven Rivers				Basal Brushy Canyon			
Queen				Bone Spring	3698'	Limestone	Oil/Natural Gas
Capitan	1280'	Limestone/Dolomite	Usable Water	1st Bone Spring	5609'	Sandstone	Oil/Natural Gas
Grayburg				2nd Bone Spring	6296'	Sandstone	Oil/Natural Gas
San Andres				3rd Bone Spring	7618'	Sandstone	Oil/Natural Gas
Glorietta				Wolfcamp	7973'	Shale/Sandstone/Limestone	Oil/Natural Gas

Casing Program Design A						BLM Minimum Safety Factors		1.125	1.0	1.6 Dry	1.6 Dry
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst		1.8 Wet	1.8 Wet
										SF Jt Tension	SF Body Tension
surface	26'	0'	0'	350'	350'	20" 94# J55 BTC	3.40	13.80		42.61	44.98
Int 1	17.5'	0'	0'	1200'	1200'	13.375" 48# H40 STC	1.37	3.08		5.59	9.39
Int 2	12.25'	0'	0'	2300'	2300'	9.625" 36# J55 LTC	1.88	3.27		5.47	6.81
Production	8.75'	0'	0'	7391'	7310'	7" 26# N-80 LTC	1.41	1.88		2.70	3.14
Liner	6.125'	7191'	7120'	18655'	7597'	4.5" 13.5# P110 LTC	1.56	1.81		2.18	2.73

All casing strings will be tested in accordance with 43 CFR Part 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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd 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 nd 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?	Y
If yes, are there two strings cemented to surface?	Y
(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?	

Mewbourne Oil Company, Santa Maria 31/36 Fed Com 626H

Sec 32, T20S, R27E

SHL: 2481' FNL 800' FWL (Sec 32)

BHL: 1980' FSL 100' FWL (Sec 36)

Design A - Cement Program

Csg. Size		# Sacks	Wt., lb/gal	Yield, ft ³ /sack	TOC/BOC	Volume, ft ³	% Excess	Slurry Description
20.000 in	LEAD	380	12.5	2.12	0' - 261'	810	100%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	261' - 350'	268		Class C: Retarder
13.375 in	LEAD	460	12.5	2.12	0' - 942'	980	50%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	942' - 1200'	268		Class C: Retarder
1st Stg 9.625 in	LEAD	70	12.5	2.12	1255' - 1630'	150	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	1630' - 2300'	268		Class C: Retarder
9 5/8" DV Tool @ 1255'								
2nd Stg 9.625 in	LEAD	170	12.5	2.12	0' - 921'	370	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	100	14.8	1.34	921' - 1255'	0		Class C: Retarder
1st Stg 7 in	LEAD	50	12.5	2.12	6200' - 6425'	110	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	400	15.6	1.18	6425' - 7390.6'	472		Class H: Retarder, Fluid Loss, Defoamer
7" DV Tool @ 6200'								
2nd Stg 7 in	LEAD	370	12.5	2.12	1230' - 5479'	790	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	100	14.8	1.34	5479' - 6200'	134		Class C: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	730	13.5	1.85	7190.6' - 18654.8'	1360	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-setting Agent

Pressure Control Equipment

BOP installed and tested before drilling hole, in:	Size, in	System Rated WP	Type	Tested to:	Rating Depth	
17.5	20	5M	Annular	X	2500#	18,655'
			Blind Ram	X		
		5M	Pipe Ram	X	5000#	
			Double Ram			
			Other*			

*Specify if additional ram is utilized.

Equipment: Annular, Pipe Rams, Blind Rams, Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Variance Request: A variance is requested for the use of a variable choke line from the BOP to the choke manifold. See attached for hydrostatic test chart. Anchors are not required by manufacturer. Variance is requested to use a multi bowl wellhead. Variance is requested to perform break testing according to attached procedure.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR Part 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

Y	Formation integrity test will be performed per 43 CFR Part 3172. On Exploratory wells or 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. Will be tested in accordance with 43 CFR Part 3172.
N	Mewbourne Oil Company request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack.

Mud Program

Depth (MD)	Mud Wt., lb/gal	Mud Type
0' - 350'	8.4	Fresh Water
350' - 1200'	9	Brine
1200' - 2300'	9	Brine
2300' - 7390.6'	10	Cut-Brine
7390.6' - 18654.8'	11.5	OBM

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	Pason/PVT/Visual Monitoring
---	-----------------------------

Mewbourne Oil Company, Santa Maria 31/36 Fed Com 626H

Sec 32, T20S, R27E

SHL: 2481' FNL 800' FWL (Sec 32)

BHL: 1980' FSL 100' FWL (Sec 36)

Logging and Testing Procedures

Logging, Coring and Testing.	
Y	Will run GR/CNL from KOP (7390.6') to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
N	No logs are planned based on well control or offset log information. Offset Well:
N	Coring? If yes, explain:

Open & Cased Hole Logs Run In the Well

<input type="checkbox"/>	Caliper	<input type="checkbox"/>	Cement Bond Log	<input type="checkbox"/>	CNL/FDC
<input type="checkbox"/>	Compensated Densilog	<input checked="" type="checkbox"/>	Compensated Neutron Log	<input type="checkbox"/>	Computer Generated Log
<input type="checkbox"/>	Dip Meter Log	<input checked="" type="checkbox"/>	Directional Survey	<input type="checkbox"/>	Dual Induction/Microresistivity
<input type="checkbox"/>	Dual Lateral Log/Microspherically Focused	<input type="checkbox"/>	Electric Log	<input type="checkbox"/>	Formation Density Compensated Log
<input checked="" type="checkbox"/>	Gamma Ray Log	<input checked="" type="checkbox"/>	Measurement While Drilling	<input type="checkbox"/>	Mud Log/Geological Lithology Log
<input type="checkbox"/>	Other	<input type="checkbox"/>	Porosity-Resistivity Log	<input type="checkbox"/>	Sidewall Neutron Log
<input type="checkbox"/>	Sonic Log	<input type="checkbox"/>	Spontaneous Potential Log	<input type="checkbox"/>	Temperature Log

Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4714 psi
BH Temperature	140
Abnormal Temp, Pressure, or Geologic Hazards	No

Mitigation measure for abnormal conditions. Describe. **Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.**

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

	H2S is present
X	H2S Plan attached

Mewbourne Oil Company, Santa Maria 31/36 Fed Com 626H

Sec 32, T20S, R27E

SHL: 2481' FNL 800' FWL (Sec 32)

BHL: 1980' FSL 100' FWL (Sec 36)

Other facets of operation

Mewbourne Oil Company also requests approval to implement Design B as described below. BLM will be notified of elected design.

Offline Cementing Variance: Variance is request to perform offline cementing according to the attached procedure.

Casing Program Design B						BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	1.8 Wet	1.8 Wet
surface	26"	0'	0'	350'	350'	20" 94# J55 BTC	3.40	13.80	42.61	44.98
Int 1	17.5"	0'	0'	1200'	1200'	13.375" 48# H40 STC	1.37	3.08	5.59	9.39
Int 2	12.25"	0'	0'	2300'	2300'	9.625" 36# J55 LTC	1.88	3.27	5.47	6.81
Production	8.75"	0'	0'	8291'	7883'	7" 26# HCP110 LTC	1.81	2.31	3.21	3.85
Liner	6.125"	7391'	7310'	18655'	7883'	4.5" 13.5# P110 LTC	1.58	1.84	2.22	2.78

All casing strings will be tested in accordance with 43 CFR Part 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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd 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 nd 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?	Y
If yes, are there two strings cemented to surface?	Y
(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?	

Design B - Cement Program

Csg. Size		# Sacks	Wt., lb/gal	Yield, ft ³ /sack	TOC/BOC	Volume, ft ³	% Excess	Slurry Description
20.000 in	LEAD	380	12.5	2.12	0' - 261'	810	100%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	261' - 350'	268		Class C: Retarder
13.375 in	LEAD	460	12.5	2.12	0' - 942'	980	50%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	942' - 1200'	268		Class C: Retarder
1st Stg 9.625 in	LEAD	70	12.5	2.12	1255' - 1630'	150	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	1630' - 2300'	268		Class C: Retarder
9 5/8" DV Tool @ 1255'								
2nd Stg 9.625 in	LEAD	170	12.5	2.12	0' - 921'	370	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	100	14.8	1.34	921' - 1255'	0		Class C: Retarder
1st Stg 7 in	LEAD	50	12.5	2.12	6200' - 6595'	110	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	400	15.6	1.18	6595' - 8290.8'	472		Class H: Retarder, Fluid Loss, Defoamer
7" DV Tool @ 6200'								
2nd Stg 7 in	LEAD	370	12.5	2.12	1230' - 5479'	790	25%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	100	14.8	1.34	5479' - 6200'	134		Class C: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	720	13.5	1.85	7390.6' - 18654.8'	1340	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

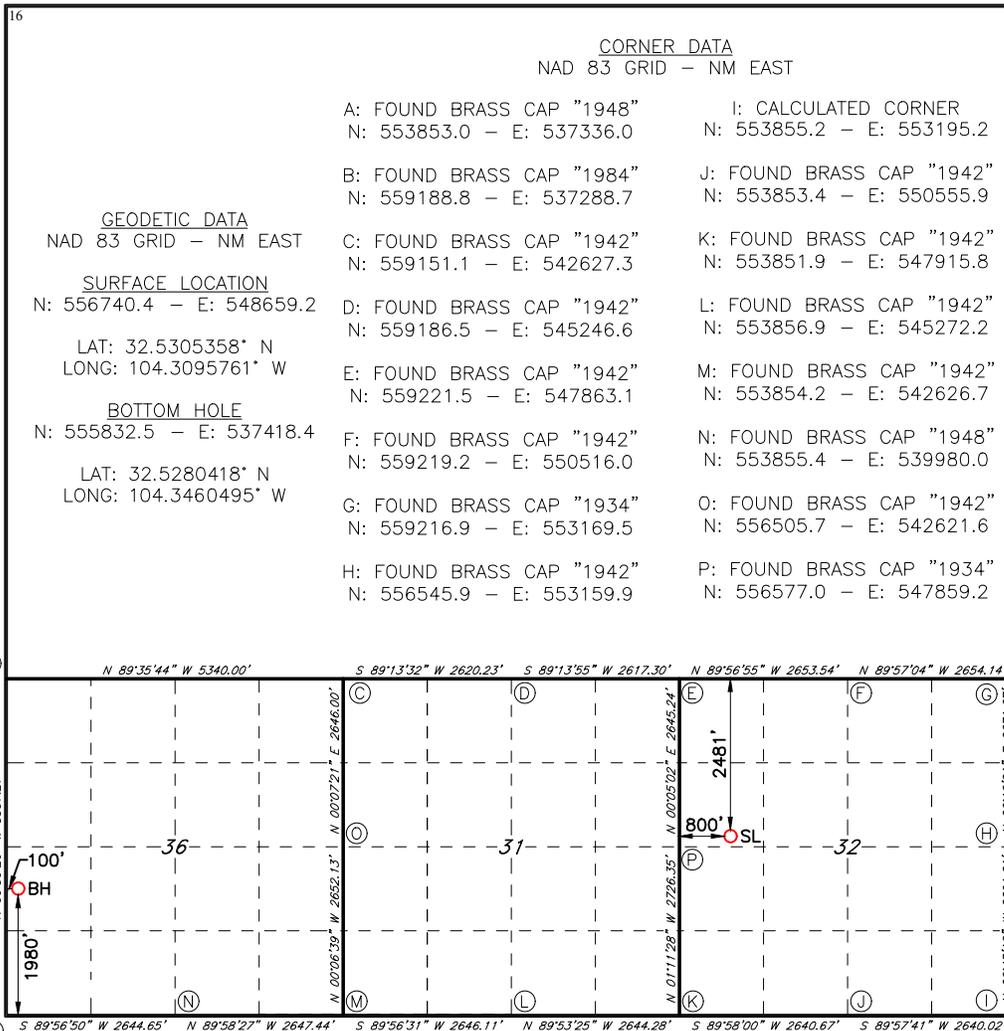
Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-55252		² Pool Code 96381		³ Pool Name Avalon East; Lower Bone Spring					
⁴ Property Code 336006		⁵ Property Name SANTA MARIA 31/36 FED COM						⁶ Well Number 626H	
⁷ OGRID NO. 14744		⁸ Operator Name MEWBOURNE OIL COMPANY						⁹ Elevation 3226'	
¹⁰ Surface Location									
UL or lot no. E	Section 32	Township 20S	Range 27E	Lot Idn	Feet from the 2481	North/South line NORTH	Feet From the 800	East/West line WEST	County EDDY
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. L	Section 36	Township 20S	Range 26E	Lot Idn	Feet from the 1980	North/South line SOUTH	Feet from the 100	East/West line WEST	County EDDY
¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Conner Whitley 07/18/2024
Signature Date
Conner Whitley
Printed Name
cwhitley@mewbourne.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

01/17/2024
Date of Survey
Signature and Seal of Professional Surveyor:

19680
Certificate Number

JOB No: LS24010041R

LOCATION VERIFICATION MAP

NOT TO SCALE



*SECTION 32, TWP. 20 SOUTH, RGE. 27 EAST,
N. M. P. M., EDDY COUNTY, NEW MEXICO*

OPERATOR: Mewbourne Oil Company
 LEASE: Santa Maria 31/36 Fed Com
 WELL NO.: 626H
 ELEVATION: 3226'

LOCATION: 2481' FNL & 800' FWL
 CONTOUR INTERVAL: 10'
 USGS TOPO. SOURCE MAP:
Lake McMillan, NM (1955)

1	WELL MOVE	07/17/24
NO.	REVISION	DATE
JOB NO.: LS24010041R		
DWG. NO.: 24010041R-2		



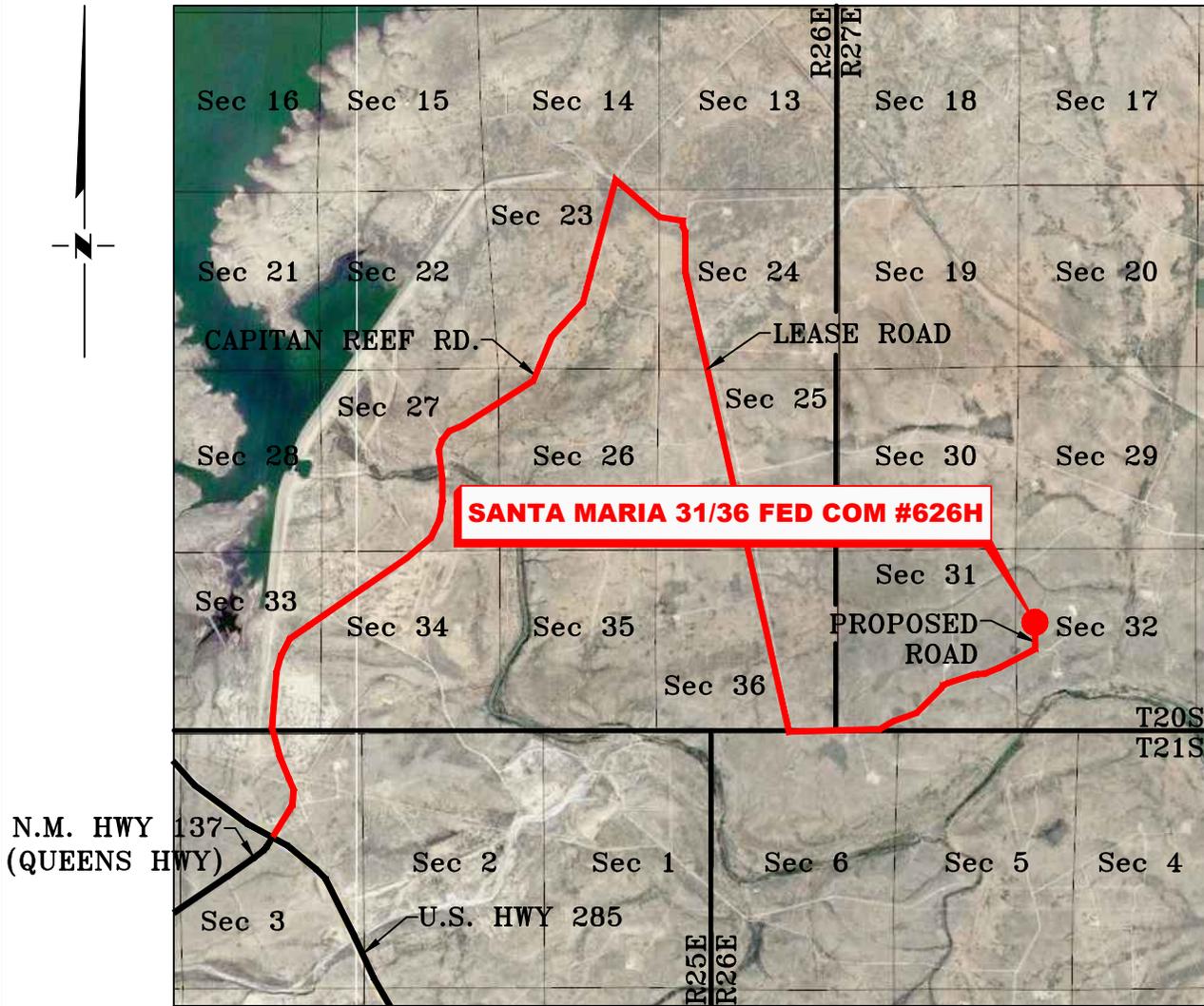
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S.
DATE: 01/17/2024
SURVEYED BY: ML/IW
DRAWN BY: AR
APPROVED BY: RMH
SHEET: 1 OF 1

Copyright 2016 - All Rights Reserved

VICINITY MAP

NOT TO SCALE



*SECTION 32, TWP. 20 SOUTH, RGE. 27 EAST,
N. M. P. M., EDDY COUNTY, NEW MEXICO*

OPERATOR: Mewbourne Oil Company
 LEASE: Santa Maria 31/36 Fed Com
 WELL NO.: 626H

LOCATION: 2481' FNL & 800' FWL
 ELEVATION: 3226'

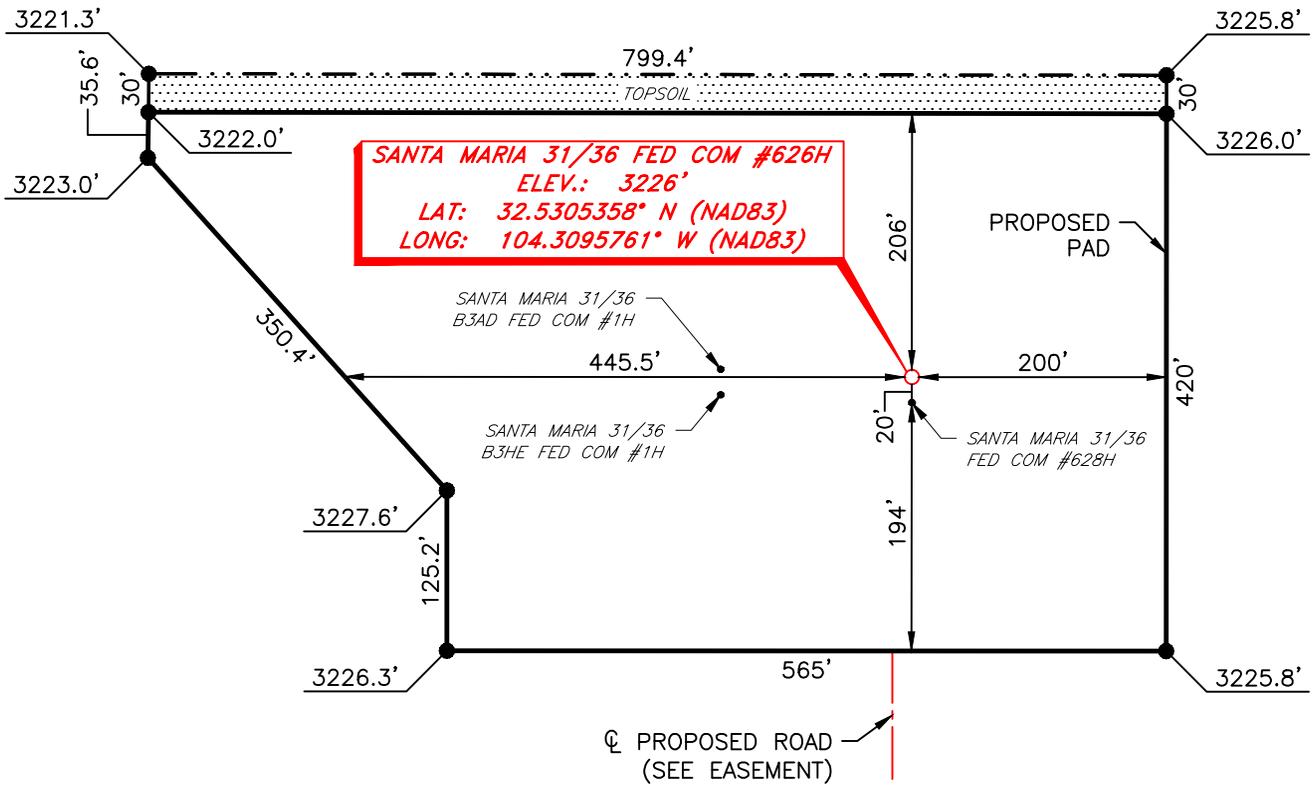
1	WELL MOVE	07/17/24
NO.	REVISION	DATE
JOB NO.: LS24010041R		
DWG. NO.: 24010041R-3		



701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S.
DATE: 01/17/2024
SURVEYED BY: ML/IW
DRAWN BY: AR
APPROVED BY: RMH
SHEET: 1 OF 1

MEWBOURNE OIL COMPANY
SANTA MARIA 31/36 FED COM #626H
(2481' FNL & 800' FWL)
SECTION 32, T20S, R27E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. 285 & N.M Hwy 137 (Queens Hwy.);
Go Northeast on Capitan Reef Rd. approx. 4.5 miles to lease road on right;
Turn right and go Southeast approx. 3.5 miles road curves left;
Continue East approx. 1.5 miles to a proposed road on the left;
Turn left and go North approx. 0.1 miles to location on the left.

PAD FOOTAGE & ACREAGE		
QUARTER/QUARTER	FEET	ACRES
SW 1/4 NW 1/4	250,226.23 Sq Ft.	5.744
NW 1/4 SW 1/4	26,244.23 Sq Ft.	0.602
TOTAL	276,470.46 Sq Ft.	6.347



SCALE: 1" = 150'
 0 75 150
 BEARINGS ARE
 NAD 83 GRID - NM EAST
 DISTANCES ARE
 GROUND.

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
 Robert M. Howett NM PS 19680



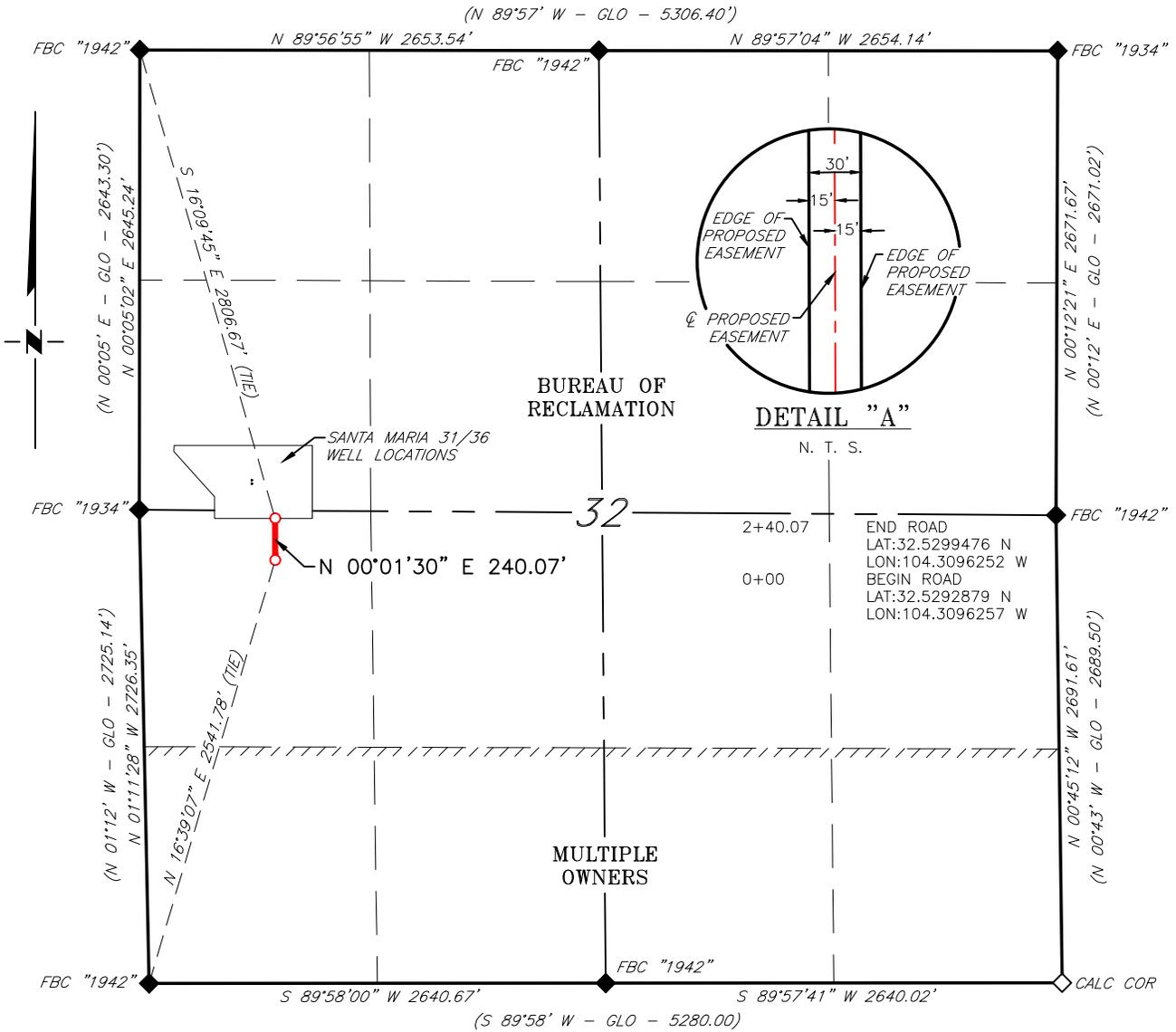
NO.	REVISION	DATE
1	WELL MOVE	07/17/24
JOB NO.: LS24010041R		
DWG. NO.: 24010041R-4		



701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 150'
DATE: 01/17/2024
SURVEYED BY: ML/IW
DRAWN BY: AR
APPROVED BY: RMH
SHEET: 1 OF 1

MEWBOURNE OIL COMPANY ACCESS ROAD FOR THE SANTA MARIA 31/36 FED COM WELL LOCATIONS SECTION 32, T20S, R27E, N. M. P. M., EDDY CO., NEW MEXICO



DESCRIPTION

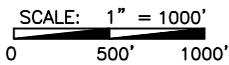
A strip of land 30 feet wide, being 240.07 feet or 14.550 rods in length, lying in Section 32, Township 20 South, Range 27 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across Bureau of Reclamation land:

BEGINNING at Engr. Sta. 0+00, a point in the Southwest quarter of Section 32, which bears, N 16°39'07" E, 2,541.78 feet, from a brass cap, stamped "1942", found for the Southwest corner of Section 32;

Thence N 00°01'30" E, 240.07 feet, to Engr. Sta. 2+40.07, the End of Survey, a point in the Southwest quarter of Section 32, which bears, S 16°09'45" E, 2,806.67 feet from brass cap, stamped "1942", found for the Northwest corner of Section 32.

Said strip of land contains 0.165 acres, more or less, and is allocated by forties as follows:

NW 1/4 SW 1/4	240.07 Feet	14.550 Rods	0.165 Acres
---------------	-------------	-------------	-------------



BEARINGS ARE GRID NAD 83
NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND

- () RECORD DATA - GLO
- ◆ FOUND MONUMENT AS NOTED
- ◇ CALCULATED CORNER
- PROPOSED ACCESS ROAD

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680



Copyright 2016 - All Rights Reserved

NO.	REVISION	DATE
JOB NO.: LS24010041		
DWG. NO.: 24010041-5		



701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 01/17/2024
SURVEYED BY: ML/IW
DRAWN BY: AR
APPROVED BY: RMH
SHEET: 1 OF 1



Mewbourne Oil Company

Sundry Request:

Mewbourne Oil Company request that the following change be made to the Santa Maria 31/36 Fed Com #626H (API #30-015-55213):

1. Change well name f/ Santa Maria 31/36 Fed Com #626H (API #30-015-55213) to Santa Maria 31/36 Fed Com #626Y.
2. Request to skid of original wellbore Santa Maria 31/36 Fed Com #626H f/ 2475 FNL & 800 FWL (32) to 2481 FNL & 800 FWL (32)
3. Attached 3160-003, Plat, Drlg Program, Dir Plan corresponding with new SHL.
4. Reference Sundry ID: 2801667 for P&A of Santa Maria 31/36 Fed Com #626Y.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Mewboure LEASE NO.: NMNM19431 LOCATION: Sec. 32, T.20 S, R 27 E COUNTY: Eddy County, New Mexico ▼
WELL NAME & NO.: Santa Maria 31-36 Fed Com 626H SURFACE HOLE FOOTAGE: 2481'/N & 800'/W BOTTOM HOLE FOOTAGE: 1980'/S & 100'/W

*Changes approved through engineering via **Sundry 2801672** on 7-18-2024. Any previous COAs not addressed within the updated COAs still apply.*

COA

H ₂ S	<input checked="" type="radio"/> No		<input type="radio"/> Yes	
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-Q	<input type="checkbox"/> Open Annulus <input type="checkbox"/> WIPP
<i>Choose an option (including blank option.)</i>				
Cave / Karst	<input type="radio"/> Low	<input type="radio"/> Medium	<input checked="" type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input type="radio"/> Multibowl	<input type="radio"/> Both	<input checked="" type="radio"/> Diverter
Cementing	<input type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input checked="" type="checkbox"/> DV Tool
Special Req	<input checked="" type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Waste Prev.	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan	<input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
Additional Language	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input checked="" type="checkbox"/> Break Testing
	<input checked="" type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **20** inch surface casing shall be set at approximately **350** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - 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 **8 hours** or **500 pounds 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 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **13-3/8** inch 1st 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, or Capitan Reef.**
- ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the Capitan interval)
 - Switch to freshwater mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
3. The minimum required fill of cement behind the **9-5/8** inch 2nd Intermediate casing is: The operator has proposed utilize a DV tool. The selected depth is below the Salado and is an acceptable set point. Operator may adjust depth of DV tool if it remains below the Salado and cement volumes are adjusted accordingly. The DV tool may be cancelled if cement circulates to surface on the first stage.
- a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

- b. **Second stage above DV tool:** Cement should tie-back at least **200 feet** into the previous casing, whichever is greater. 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, or Capitan Reef.

4. The minimum required fill of cement behind the **7 inch** production casing is: The operator has proposed utilize a DV tool. The selected depth is below the Salado and is an acceptable set point. Operator may adjust depth of DV tool if it remains below the Salado and cement volumes are adjusted accordingly. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. **Second stage above DV tool:** Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, or Capitan Reef.

5. The minimum required fill of cement behind the **4-1/2 inch** production liner is:
- Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

C. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 1st intermediate casing shoe shall be **5000 (5M)** psi. A Diverter system is approved as a variance to drill the 1st intermediate casing section.
 - 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 test.
 - iv. 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.

- v. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. 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.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- 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.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 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 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

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](mailto: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 2nd 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 2nd 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 dog house 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 test.
 - 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 crew-intensive operations.

Approved by Zota Stevens on 7/18/2024
575-234-5998 / zstevens@blm.gov

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 365629

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 365629
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated during cementing operations, then a CBL is required.	7/19/2024