

Well Name: FORTY NINER RIDGE UNIT	Well Location: T23S / R30E / SEC 27 / NENW /	County or Parish/State:
Well Number: 172H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0531277	Unit or CA Name:	Unit or CA Number: NMNM070951X
US Well Number: 3001553399	Well Status: Approved Application for Permit to Drill	Operator: MEWBOURNE OIL COMPANY

Notice of Intent

Sundry ID: 2731691

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 05/19/2023

Time Sundry Submitted: 08:42

Date proposed operation will begin: 05/25/2023

Procedure Description: Mewbourne Oil Company requests to make the following change to the approved APD: 1). Change SHL from "100' FNL & 1700' FWL (Sec 27, T23S, R30E)" to "100' FNL & 1445' FWL (Sec 27, T23S, R30E)". Please see attached C102

NOI Attachments

Procedure Description

Forty_Niner_Ridge_Unit_172H_C102_20230519084119.pdf

Well Name: FORTY NINER RIDGE UNIT	Well Location: T23S / R30E / SEC 27 / NENW /	County or Parish/State:
Well Number: 172H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0531277	Unit or CA Name:	Unit or CA Number: NMNM070951X
US Well Number: 3001553399	Well Status: Approved Application for Permit to Drill	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

Operator Electronic Signature: GAGE OWEN	Signed on: MAY 19, 2023 08:41 AM
Name: MEWBOURNE OIL COMPANY	
Title: Title Engineer	
Street Address: 4801 BUSINESS PARK BLVD.	
City: HOBBS	State: NM
Phone: (575) 552-6224	
Email address: GOWEN@MEWBOURNE.COM	

Field

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

BLM Point of Contact

BLM POC Name: Bobby Ballard	BLM POC Title: Natural Resource Specialist
BLM POC Phone: 5752342235	BLM POC Email Address: bballard@blm.gov
Disposition: Approved	Disposition Date: 05/25/2023
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	
7. If Unit of CA/Agreement, Name and/or No.	
8. Well Name and No.	
9. API Well No.	
10. Field and Pool or Exploratory Area	
11. Country or Parish, State	

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well	
<input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator	
3a. Address	3b. Phone No. (include area code)
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)	

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 recompletion 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: NENW / 100 FNL / 1700 FWL / TWSP: 23S / RANGE: 30E / SECTION: 27 / LAT: 32.2829176 / LONG: -103.8721049 (TVD: 0 feet, MD: 0 feet)
PPP: NENW / 1323 FNL / 1870 FWL / TWSP: 23S / RANGE: 30E / SECTION: 15 / LAT: 32.3122514 / LONG: -103.8715725 (TVD: 10910 feet, MD: 20435 feet)
PPP: SENW / 2646 FNL / 1870 FWL / TWSP: 23S / RANGE: 30E / SECTION: 15 / LAT: 32.3050181 / LONG: -103.8715666 (TVD: 10914 feet, MD: 19112 feet)
PPP: SESW / 0 FSL / 1870 FWL / TWSP: 23S / RANGE: 30E / SECTION: 15 / LAT: 32.2977406 / LONG: -103.8715622 (TVD: 10922 feet, MD: 16464 feet)
PPP: SESW / 100 FSL / 1870 FWL / TWSP: 23S / RANGE: 30E / SECTION: 22 / LAT: 32.2834655 / LONG: -103.8715534 (TVD: 10936 feet, MD: 11271 feet)
BHL: NENW / 20 FNL / 1870 FWL / TWSP: 23S / RANGE: 30E / SECTION: 15 / LAT: 32.3122514 / LONG: -103.8715725 (TVD: 10906 feet, MD: 21743 feet)

CONFIDENTIAL

Submit a Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-015-53399
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Forty Niner Ridge Unit
8. Well Number 172H
9. OGRID Number 14744
10. Pool name or Wildcat Forty Niner Ridge; Bone Spring

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>	
2. Name of Operator Mewbourne Oil Company	
3. Address of Operator P.O. Box 5270 Hobbs, NM 88241	
4. Well Location Unit Letter <u>C</u> : <u>100</u> feet from the <u>North</u> line and <u>1445</u> feet from the <u>West</u> line Section <u>15</u> Township <u>23S</u> Range <u>30E</u> NMPM County <u>Eddy</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3276'	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
DOWNHOLE COMMINGLE <input type="checkbox"/>	P AND A <input type="checkbox"/>
CLOSED-LOOP SYSTEM <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>
OTHER: <input type="checkbox"/>	OTHER: <input type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Mewbourne Oil Company requests to make the following changes to the approved APD:

1.) Change target formation/Pool from "Purple Sage; Wolfcamp Gas (98220)" to "Forty Niner Ridge; Bone Spring (24720)."

2.) Change Casing/Cement/Mud Program.

3.) Change SHL from "100' FNL & 1700' FWL (Sec 27, T23S, R30E)" to "100' FNL & 1445' FWL (Sec 27, T23S, R30E)".

Please see attached drilling plan and other documentation referencing design changes and data that corresponds to said procedural alterations

Spud Date:

11/30/23

Rig Release Date:

12/24/23

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Benjamin Davis TITLE Petroleum Engineer DATE 6/5/23

Type or print name Benjamin Davis E-mail address: bdavis@mewbourne.com PHONE: 580-574-3250

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

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 30-015-53399	² Pool Code 98220	³ Pool Name PURPLE SAGE WOLFCAMP
⁴ Property Code 35090	⁵ Property Name FORTY NINER RIDGE UNIT	⁶ Well Number 172H
⁷ GRID NO. 14744	⁸ Operator Name MEWBOURNE OIL COMPANY	⁹ Elevation 3278'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
C	27	23S	30E		100	NORTH	1445	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	15	23S	30E		20	NORTH	2190	WEST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

<p>16</p> <p><u>GEODETIC DATA</u> NAD 83 GRID - NM EAST</p> <p><u>SURFACE LOCATION</u> N: 466964.7 - E: 683872.7 LAT: 32.2829176° N LONG: 103.8721049° W</p> <p><u>BOTTOM HOLE</u> N: 477637.9 - E: 684311.2 LAT: 32.3122509° N LONG: 103.8705369° W</p> <p><u>CORNER DATA</u> NAD 83 GRID - NM EAST</p> <table border="0"> <tr> <td>A: FOUND BRASS CAP "1942" N: 461758.2 - E: 682200.1</td> <td>J: FOUND BRASS CAP "1942" N: 475023.4 - E: 687478.1</td> </tr> <tr> <td>B: FOUND BRASS CAP "1942" N: 464404.8 - E: 682185.2</td> <td>K: FOUND BRASS CAP "1942" N: 472376.5 - E: 687479.5</td> </tr> <tr> <td>C: FOUND BRASS CAP "1942" N: 467055.4 - E: 682172.6</td> <td>L: FOUND BRASS CAP "1942" N: 469732.1 - E: 687504.4</td> </tr> <tr> <td>D: FOUND BRASS CAP "1942" N: 469704.3 - E: 682151.4</td> <td>M: FOUND BRASS CAP "1942" N: 467084.8 - E: 687530.3</td> </tr> <tr> <td>E: FOUND BRASS CAP "1942" N: 472352.8 - E: 682132.3</td> <td>N: FOUND BRASS CAP "1942" N: 464438.9 - E: 687539.5</td> </tr> <tr> <td>F: FOUND BRASS CAP "1942" N: 475001.9 - E: 682127.2</td> <td>O: FOUND BRASS CAP "1942" N: 461793.6 - E: 687549.5</td> </tr> <tr> <td>G: FOUND BRASS CAP "1942" N: 477649.8 - E: 682121.7</td> <td>P: FOUND BRASS CAP "1942" N: 461774.6 - E: 684874.6</td> </tr> <tr> <td>H: FOUND BRASS CAP "1942" N: 477659.7 - E: 684797.6</td> <td>Q: FOUND BRASS CAP "1942" N: 467070.0 - E: 684851.5</td> </tr> <tr> <td>I: FOUND BRASS CAP "1942" N: 477668.6 - E: 687475.8</td> <td>R: FOUND BRASS CAP "1942" N: 472364.0 - E: 684804.5</td> </tr> </table>	A: FOUND BRASS CAP "1942" N: 461758.2 - E: 682200.1	J: FOUND BRASS CAP "1942" N: 475023.4 - E: 687478.1	B: FOUND BRASS CAP "1942" N: 464404.8 - E: 682185.2	K: FOUND BRASS CAP "1942" N: 472376.5 - E: 687479.5	C: FOUND BRASS CAP "1942" N: 467055.4 - E: 682172.6	L: FOUND BRASS CAP "1942" N: 469732.1 - E: 687504.4	D: FOUND BRASS CAP "1942" N: 469704.3 - E: 682151.4	M: FOUND BRASS CAP "1942" N: 467084.8 - E: 687530.3	E: FOUND BRASS CAP "1942" N: 472352.8 - E: 682132.3	N: FOUND BRASS CAP "1942" N: 464438.9 - E: 687539.5	F: FOUND BRASS CAP "1942" N: 475001.9 - E: 682127.2	O: FOUND BRASS CAP "1942" N: 461793.6 - E: 687549.5	G: FOUND BRASS CAP "1942" N: 477649.8 - E: 682121.7	P: FOUND BRASS CAP "1942" N: 461774.6 - E: 684874.6	H: FOUND BRASS CAP "1942" N: 477659.7 - E: 684797.6	Q: FOUND BRASS CAP "1942" N: 467070.0 - E: 684851.5	I: FOUND BRASS CAP "1942" N: 477668.6 - E: 687475.8	R: FOUND BRASS CAP "1942" N: 472364.0 - E: 684804.5	<p>The diagram shows a well location plat with a grid. A blue rectangle represents the 'Production Area' and a red rectangle represents the 'Project Area'. The well is located at the intersection of the 27th and 15th sections, 23S township, 30E range. The surface location is marked with a blue dot and the bottom hole location with a red dot. The well is labeled '172H' and the pool is 'PURPLE SAGE WOLFCAMP'. The acreage is 640 acres. The plat is dated 5-17-2021 and the operator is Mewbourne Oil Company.</p>	<p>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.</p> <p><i>Gage Owen</i> 5/15/2023 Signature Date</p> <p>Gage Owen Printed Name</p> <p>gowen@mewbourne.com E-mail Address</p> <p>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.</p> <p>5-17-2021 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>19680 Certificate Number</p> <p>REV: BH MOVE 4/26/23</p> <p>Job No: LS21050477R1</p>
A: FOUND BRASS CAP "1942" N: 461758.2 - E: 682200.1	J: FOUND BRASS CAP "1942" N: 475023.4 - E: 687478.1																			
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Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Forty Niner Ridge Unit #172H

Sec 27, T23S, R30E

SHL: 100' FNL & 1700' FWL (Sec 27)

BHL: 20' FNL & 2190' FWL (Sec 15)

Plan: Design #1

Standard Planning Report

15 May, 2023

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Forty Niner Ridge Unit #172H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3306.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3306.0usft (Original Well Elev)
Site:	Forty Niner Ridge Unit #172H	North Reference:	Grid
Well:	Sec 27, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 20' FNL & 2190' FWL (Sec 15)		
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		Forty Niner Ridge Unit #172H				
Site Position: From:	Map	Northing:	466,964.70	usft	Latitude:	32.2829178
		Easting:	683,872.70	usft	Longitude:	-103.8721049
		Position Uncertainty:	0.0	usft	Slot Radius:	13-3/16

Well	Sec 27, T23S, R30E					
Well Position	+N/-S	0.0 usft	Northing:	466,964.70 usft	Latitude:	32.2829178
	+E/-W	0.0 usft	Easting:	683,872.70 usft	Longitude:	-103.8721049
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,306.0 usft	Ground Level:	3,278.0 usft
Grid Convergence:		0.25 °				

Wellbore	BHL: 20' FNL & 2190' FWL (Sec 15)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.29	60.10	48,241.02971306

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	2.35	

Plan Survey Tool Program	Date	5/15/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	21,907.7	Design #1 (BHL: 20' FNL & 2190')		

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	
1,325.0	0.00	0.00	1,325.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,482.7	3.15	105.94	1,482.6	-1.2	4.2	2.00	2.00	0.00	105.94	
10,609.3	3.15	105.94	10,595.4	-139.1	487.0	0.00	0.00	0.00	0.00	
10,767.0	0.00	0.00	10,753.0	-140.3	491.1	2.00	-2.00	0.00	180.00	KOP: 243' FNL & 219
11,668.7	90.17	359.72	11,326.0	434.4	488.3	10.00	10.00	0.00	-0.28	
21,907.7	90.17	359.72	11,296.0	10,673.2	438.5	0.00	0.00	0.00	0.00	BHL: 20' FNL & 2190'

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Forty Niner Ridge Unit #172H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3306.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3306.0usft (Original Well Elev)
Site:	Forty Niner Ridge Unit #172H	North Reference:	Grid
Well:	Sec 27, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 20' FNL & 2190' FWL (Sec 15)		
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: 100' FNL & 1700' FWL (Sec 27)									
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
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,325.0	0.00	0.00	1,325.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	1.50	105.94	1,400.0	-0.3	0.9	-0.2	2.00	2.00	0.00
1,482.7	3.15	105.94	1,482.6	-1.2	4.2	-1.0	2.00	2.00	0.00
1,500.0	3.15	105.94	1,499.9	-1.5	5.1	-1.2	0.00	0.00	0.00
1,600.0	3.15	105.94	1,599.7	-3.0	10.4	-2.5	0.00	0.00	0.00
1,700.0	3.15	105.94	1,699.6	-4.5	15.7	-3.8	0.00	0.00	0.00
1,800.0	3.15	105.94	1,799.4	-6.0	21.0	-5.1	0.00	0.00	0.00
1,900.0	3.15	105.94	1,899.3	-7.5	26.2	-6.4	0.00	0.00	0.00
2,000.0	3.15	105.94	1,999.1	-9.0	31.5	-7.7	0.00	0.00	0.00
2,100.0	3.15	105.94	2,099.0	-10.5	36.8	-9.0	0.00	0.00	0.00
2,200.0	3.15	105.94	2,198.8	-12.0	42.1	-10.3	0.00	0.00	0.00
2,300.0	3.15	105.94	2,298.7	-13.5	47.4	-11.6	0.00	0.00	0.00
2,400.0	3.15	105.94	2,398.5	-15.1	52.7	-12.9	0.00	0.00	0.00
2,500.0	3.15	105.94	2,498.4	-16.6	58.0	-14.2	0.00	0.00	0.00
2,600.0	3.15	105.94	2,598.2	-18.1	63.3	-15.5	0.00	0.00	0.00
2,700.0	3.15	105.94	2,698.1	-19.6	68.6	-16.8	0.00	0.00	0.00
2,800.0	3.15	105.94	2,797.9	-21.1	73.9	-18.0	0.00	0.00	0.00
2,900.0	3.15	105.94	2,897.8	-22.6	79.1	-19.3	0.00	0.00	0.00
3,000.0	3.15	105.94	2,997.6	-24.1	84.4	-20.6	0.00	0.00	0.00
3,100.0	3.15	105.94	3,097.5	-25.6	89.7	-21.9	0.00	0.00	0.00
3,200.0	3.15	105.94	3,197.3	-27.1	95.0	-23.2	0.00	0.00	0.00
3,300.0	3.15	105.94	3,297.2	-28.6	100.3	-24.5	0.00	0.00	0.00
3,400.0	3.15	105.94	3,397.0	-30.2	105.6	-25.8	0.00	0.00	0.00
3,500.0	3.15	105.94	3,496.9	-31.7	110.9	-27.1	0.00	0.00	0.00
3,600.0	3.15	105.94	3,596.7	-33.2	116.2	-28.4	0.00	0.00	0.00
3,700.0	3.15	105.94	3,696.6	-34.7	121.5	-29.7	0.00	0.00	0.00
3,800.0	3.15	105.94	3,796.4	-36.2	126.8	-31.0	0.00	0.00	0.00
3,900.0	3.15	105.94	3,896.3	-37.7	132.0	-32.3	0.00	0.00	0.00
4,000.0	3.15	105.94	3,996.1	-39.2	137.3	-33.6	0.00	0.00	0.00
4,100.0	3.15	105.94	4,096.0	-40.7	142.6	-34.8	0.00	0.00	0.00
4,200.0	3.15	105.94	4,195.8	-42.2	147.9	-36.1	0.00	0.00	0.00
4,300.0	3.15	105.94	4,295.7	-43.8	153.2	-37.4	0.00	0.00	0.00
4,400.0	3.15	105.94	4,395.5	-45.3	158.5	-38.7	0.00	0.00	0.00
4,500.0	3.15	105.94	4,495.4	-46.8	163.8	-40.0	0.00	0.00	0.00
4,600.0	3.15	105.94	4,595.2	-48.3	169.1	-41.3	0.00	0.00	0.00
4,700.0	3.15	105.94	4,695.0	-49.8	174.4	-42.6	0.00	0.00	0.00
4,800.0	3.15	105.94	4,794.9	-51.3	179.7	-43.9	0.00	0.00	0.00
4,900.0	3.15	105.94	4,894.7	-52.8	184.9	-45.2	0.00	0.00	0.00
5,000.0	3.15	105.94	4,994.6	-54.3	190.2	-46.5	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Forty Niner Ridge Unit #172H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3306.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3306.0usft (Original Well Elev)
Site:	Forty Niner Ridge Unit #172H	North Reference:	Grid
Well:	Sec 27, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 20' FNL & 2190' FWL (Sec 15)		
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	3.15	105.94	5,094.4	-55.8	195.5	-47.8	0.00	0.00	0.00
5,200.0	3.15	105.94	5,194.3	-57.4	200.8	-49.1	0.00	0.00	0.00
5,300.0	3.15	105.94	5,294.1	-58.9	206.1	-50.4	0.00	0.00	0.00
5,400.0	3.15	105.94	5,394.0	-60.4	211.4	-51.7	0.00	0.00	0.00
5,500.0	3.15	105.94	5,493.8	-61.9	216.7	-52.9	0.00	0.00	0.00
5,600.0	3.15	105.94	5,593.7	-63.4	222.0	-54.2	0.00	0.00	0.00
5,700.0	3.15	105.94	5,693.5	-64.9	227.3	-55.5	0.00	0.00	0.00
5,800.0	3.15	105.94	5,793.4	-66.4	232.6	-56.8	0.00	0.00	0.00
5,900.0	3.15	105.94	5,893.2	-67.9	237.8	-58.1	0.00	0.00	0.00
6,000.0	3.15	105.94	5,993.1	-69.4	243.1	-59.4	0.00	0.00	0.00
6,100.0	3.15	105.94	6,092.9	-71.0	248.4	-60.7	0.00	0.00	0.00
6,200.0	3.15	105.94	6,192.8	-72.5	253.7	-62.0	0.00	0.00	0.00
6,300.0	3.15	105.94	6,292.6	-74.0	259.0	-63.3	0.00	0.00	0.00
6,400.0	3.15	105.94	6,392.5	-75.5	264.3	-64.6	0.00	0.00	0.00
6,500.0	3.15	105.94	6,492.3	-77.0	269.6	-65.9	0.00	0.00	0.00
6,600.0	3.15	105.94	6,592.2	-78.5	274.9	-67.2	0.00	0.00	0.00
6,700.0	3.15	105.94	6,692.0	-80.0	280.2	-68.5	0.00	0.00	0.00
6,800.0	3.15	105.94	6,791.9	-81.5	285.5	-69.7	0.00	0.00	0.00
6,900.0	3.15	105.94	6,891.7	-83.0	290.7	-71.0	0.00	0.00	0.00
7,000.0	3.15	105.94	6,991.6	-84.6	296.0	-72.3	0.00	0.00	0.00
7,100.0	3.15	105.94	7,091.4	-86.1	301.3	-73.6	0.00	0.00	0.00
7,200.0	3.15	105.94	7,191.3	-87.6	306.6	-74.9	0.00	0.00	0.00
7,300.0	3.15	105.94	7,291.1	-89.1	311.9	-76.2	0.00	0.00	0.00
7,400.0	3.15	105.94	7,391.0	-90.6	317.2	-77.5	0.00	0.00	0.00
7,500.0	3.15	105.94	7,490.8	-92.1	322.5	-78.8	0.00	0.00	0.00
7,600.0	3.15	105.94	7,590.7	-93.6	327.8	-80.1	0.00	0.00	0.00
7,700.0	3.15	105.94	7,690.5	-95.1	333.1	-81.4	0.00	0.00	0.00
7,800.0	3.15	105.94	7,790.4	-96.6	338.3	-82.7	0.00	0.00	0.00
7,900.0	3.15	105.94	7,890.2	-98.2	343.6	-84.0	0.00	0.00	0.00
8,000.0	3.15	105.94	7,990.1	-99.7	348.9	-85.3	0.00	0.00	0.00
8,100.0	3.15	105.94	8,089.9	-101.2	354.2	-86.5	0.00	0.00	0.00
8,200.0	3.15	105.94	8,189.7	-102.7	359.5	-87.8	0.00	0.00	0.00
8,300.0	3.15	105.94	8,289.6	-104.2	364.8	-89.1	0.00	0.00	0.00
8,400.0	3.15	105.94	8,389.4	-105.7	370.1	-90.4	0.00	0.00	0.00
8,500.0	3.15	105.94	8,489.3	-107.2	375.4	-91.7	0.00	0.00	0.00
8,600.0	3.15	105.94	8,589.1	-108.7	380.7	-93.0	0.00	0.00	0.00
8,700.0	3.15	105.94	8,689.0	-110.2	386.0	-94.3	0.00	0.00	0.00
8,800.0	3.15	105.94	8,788.8	-111.8	391.2	-95.6	0.00	0.00	0.00
8,900.0	3.15	105.94	8,888.7	-113.3	396.5	-96.9	0.00	0.00	0.00
9,000.0	3.15	105.94	8,988.5	-114.8	401.8	-98.2	0.00	0.00	0.00
9,100.0	3.15	105.94	9,088.4	-116.3	407.1	-99.5	0.00	0.00	0.00
9,200.0	3.15	105.94	9,188.2	-117.8	412.4	-100.8	0.00	0.00	0.00
9,300.0	3.15	105.94	9,288.1	-119.3	417.7	-102.1	0.00	0.00	0.00
9,400.0	3.15	105.94	9,387.9	-120.8	423.0	-103.4	0.00	0.00	0.00
9,500.0	3.15	105.94	9,487.8	-122.3	428.3	-104.6	0.00	0.00	0.00
9,600.0	3.15	105.94	9,587.6	-123.8	433.6	-105.9	0.00	0.00	0.00
9,700.0	3.15	105.94	9,687.5	-125.3	438.9	-107.2	0.00	0.00	0.00
9,800.0	3.15	105.94	9,787.3	-126.9	444.1	-108.5	0.00	0.00	0.00
9,900.0	3.15	105.94	9,887.2	-128.4	449.4	-109.8	0.00	0.00	0.00
10,000.0	3.15	105.94	9,987.0	-129.9	454.7	-111.1	0.00	0.00	0.00
10,100.0	3.15	105.94	10,086.9	-131.4	460.0	-112.4	0.00	0.00	0.00
10,200.0	3.15	105.94	10,186.7	-132.9	465.3	-113.7	0.00	0.00	0.00
10,300.0	3.15	105.94	10,286.6	-134.4	470.6	-115.0	0.00	0.00	0.00
10,400.0	3.15	105.94	10,386.4	-135.9	475.9	-116.3	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Forty Niner Ridge Unit #172H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3306.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3306.0usft (Original Well Elev)
Site:	Forty Niner Ridge Unit #172H	North Reference:	Grid
Well:	Sec 27, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 20' FNL & 2190' FWL (Sec 15)		
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)
10,500.0	3.15	105.94	10,486.3	-137.4	481.2	-117.6	0.00	0.00	0.00
10,609.3	3.15	105.94	10,595.4	-139.1	487.0	-119.0	0.00	0.00	0.00
10,700.0	1.34	105.94	10,686.0	-140.1	490.4	-119.8	2.00	-2.00	0.00
10,767.0	0.00	0.00	10,753.0	-140.3	491.1	-120.0	2.00	-2.00	0.00
KOP: 243' FNL & 2190' FWL (Sec 27)									
10,800.0	3.30	359.72	10,786.0	-139.3	491.1	-119.1	10.00	10.00	0.00
10,850.0	8.30	359.72	10,835.7	-134.3	491.1	-114.0	10.00	10.00	0.00
10,900.0	13.30	359.72	10,884.8	-124.9	491.1	-104.6	10.00	10.00	0.00
10,950.0	18.30	359.72	10,932.9	-111.3	491.0	-91.1	10.00	10.00	0.00
11,000.0	23.30	359.72	10,979.6	-93.5	490.9	-73.3	10.00	10.00	0.00
11,050.0	28.30	359.72	11,024.7	-71.8	490.8	-51.6	10.00	10.00	0.00
11,100.0	33.30	359.72	11,067.6	-46.2	490.7	-26.0	10.00	10.00	0.00
11,150.0	38.30	359.72	11,108.1	-17.0	490.5	3.2	10.00	10.00	0.00
11,200.0	43.30	359.72	11,146.0	15.7	490.4	35.8	10.00	10.00	0.00
11,250.0	48.30	359.72	11,180.8	51.5	490.2	71.6	10.00	10.00	0.00
11,300.0	53.30	359.72	11,212.4	90.3	490.0	110.3	10.00	10.00	0.00
11,350.0	58.30	359.72	11,240.5	131.6	489.8	151.6	10.00	10.00	0.00
11,400.0	63.30	359.72	11,264.9	175.2	489.6	195.2	10.00	10.00	0.00
11,450.0	68.30	359.72	11,285.4	220.8	489.4	240.7	10.00	10.00	0.00
11,500.0	73.30	359.72	11,301.8	268.0	489.1	287.9	10.00	10.00	0.00
11,550.0	78.30	359.72	11,314.1	316.5	488.9	336.3	10.00	10.00	0.00
11,600.0	83.30	359.72	11,322.1	365.8	488.7	385.6	10.00	10.00	0.00
11,650.0	88.30	359.72	11,325.7	415.7	488.4	435.4	10.00	10.00	0.00
11,667.0	90.00	359.72	11,326.0	432.7	488.3	452.4	10.00	10.00	0.00
FTP/LP: 330' FSL & 2190' FWL (Sec 22)									
11,668.7	90.17	359.72	11,326.0	434.4	488.3	454.1	10.00	10.00	0.00
11,700.0	90.17	359.72	11,325.9	465.7	488.2	485.3	0.00	0.00	0.00
11,800.0	90.17	359.72	11,325.6	565.7	487.7	585.2	0.00	0.00	0.00
11,900.0	90.17	359.72	11,325.3	665.7	487.2	685.1	0.00	0.00	0.00
12,000.0	90.17	359.72	11,325.0	765.7	486.7	785.0	0.00	0.00	0.00
12,100.0	90.17	359.72	11,324.7	865.7	486.2	884.9	0.00	0.00	0.00
12,200.0	90.17	359.72	11,324.4	965.7	485.7	984.8	0.00	0.00	0.00
12,300.0	90.17	359.72	11,324.2	1,065.7	485.3	1,084.7	0.00	0.00	0.00
12,400.0	90.17	359.72	11,323.9	1,165.7	484.8	1,184.6	0.00	0.00	0.00
12,500.0	90.17	359.72	11,323.6	1,265.7	484.3	1,284.5	0.00	0.00	0.00
12,600.0	90.17	359.72	11,323.3	1,365.7	483.8	1,384.4	0.00	0.00	0.00
12,700.0	90.17	359.72	11,323.0	1,465.6	483.3	1,484.3	0.00	0.00	0.00
12,800.0	90.17	359.72	11,322.7	1,565.6	482.8	1,584.1	0.00	0.00	0.00
12,900.0	90.17	359.72	11,322.4	1,665.6	482.3	1,684.0	0.00	0.00	0.00
13,000.0	90.17	359.72	11,322.1	1,765.6	481.9	1,783.9	0.00	0.00	0.00
13,100.0	90.17	359.72	11,321.8	1,865.6	481.4	1,883.8	0.00	0.00	0.00
13,200.0	90.17	359.72	11,321.5	1,965.6	480.9	1,983.7	0.00	0.00	0.00
13,300.0	90.17	359.72	11,321.2	2,065.6	480.4	2,083.6	0.00	0.00	0.00
13,400.0	90.17	359.72	11,320.9	2,165.6	479.9	2,183.5	0.00	0.00	0.00
13,500.0	90.17	359.72	11,320.6	2,265.6	479.4	2,283.4	0.00	0.00	0.00
13,600.0	90.17	359.72	11,320.3	2,365.6	478.9	2,383.3	0.00	0.00	0.00
13,700.0	90.17	359.72	11,320.0	2,465.6	478.4	2,483.2	0.00	0.00	0.00
13,800.0	90.17	359.72	11,319.8	2,565.6	478.0	2,583.1	0.00	0.00	0.00
13,900.0	90.17	359.72	11,319.5	2,665.6	477.5	2,683.0	0.00	0.00	0.00
14,000.0	90.17	359.72	11,319.2	2,765.6	477.0	2,782.9	0.00	0.00	0.00
14,100.0	90.17	359.72	11,318.9	2,865.6	476.5	2,882.8	0.00	0.00	0.00
14,200.0	90.17	359.72	11,318.6	2,965.6	476.0	2,982.7	0.00	0.00	0.00
14,300.0	90.17	359.72	11,318.3	3,065.6	475.5	3,082.6	0.00	0.00	0.00
14,400.0	90.17	359.72	11,318.0	3,165.6	475.0	3,182.5	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Forty Niner Ridge Unit #172H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3306.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3306.0usft (Original Well Elev)
Site:	Forty Niner Ridge Unit #172H	North Reference:	Grid
Well:	Sec 27, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 20' FNL & 2190' FWL (Sec 15)		
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)
14,500.0	90.17	359.72	11,317.7	3,265.6	474.6	3,282.3	0.00	0.00	0.00
14,600.0	90.17	359.72	11,317.4	3,365.6	474.1	3,382.2	0.00	0.00	0.00
14,700.0	90.17	359.72	11,317.1	3,465.6	473.6	3,482.1	0.00	0.00	0.00
14,800.0	90.17	359.72	11,316.8	3,565.6	473.1	3,582.0	0.00	0.00	0.00
14,900.0	90.17	359.72	11,316.5	3,665.6	472.6	3,681.9	0.00	0.00	0.00
15,000.0	90.17	359.72	11,316.2	3,765.6	472.1	3,781.8	0.00	0.00	0.00
15,100.0	90.17	359.72	11,315.9	3,865.6	471.6	3,881.7	0.00	0.00	0.00
15,200.0	90.17	359.72	11,315.7	3,965.6	471.1	3,981.6	0.00	0.00	0.00
15,300.0	90.17	359.72	11,315.4	4,065.6	470.7	4,081.5	0.00	0.00	0.00
15,400.0	90.17	359.72	11,315.1	4,165.6	470.2	4,181.4	0.00	0.00	0.00
15,500.0	90.17	359.72	11,314.8	4,265.6	469.7	4,281.3	0.00	0.00	0.00
15,600.0	90.17	359.72	11,314.5	4,365.6	469.2	4,381.2	0.00	0.00	0.00
15,700.0	90.17	359.72	11,314.2	4,465.6	468.7	4,481.1	0.00	0.00	0.00
15,800.0	90.17	359.72	11,313.9	4,565.6	468.2	4,581.0	0.00	0.00	0.00
15,900.0	90.17	359.72	11,313.6	4,665.6	467.7	4,680.9	0.00	0.00	0.00
16,000.0	90.17	359.72	11,313.3	4,765.6	467.3	4,780.8	0.00	0.00	0.00
16,100.0	90.17	359.72	11,313.0	4,865.6	466.8	4,880.7	0.00	0.00	0.00
16,200.0	90.17	359.72	11,312.7	4,965.6	466.3	4,980.5	0.00	0.00	0.00
16,300.0	90.17	359.72	11,312.4	5,065.6	465.8	5,080.4	0.00	0.00	0.00
16,400.0	90.17	359.72	11,312.1	5,165.6	465.3	5,180.3	0.00	0.00	0.00
16,500.0	90.17	359.72	11,311.8	5,265.6	464.8	5,280.2	0.00	0.00	0.00
16,600.0	90.17	359.72	11,311.6	5,365.6	464.3	5,380.1	0.00	0.00	0.00
16,632.2	90.17	359.72	11,311.5	5,397.8	464.2	5,412.3	0.00	0.00	0.00
PPP2: 0' FSL & 2190' FWL (Sec 15)									
16,700.0	90.17	359.72	11,311.3	5,465.6	463.8	5,480.0	0.00	0.00	0.00
16,800.0	90.17	359.72	11,311.0	5,565.6	463.4	5,579.9	0.00	0.00	0.00
16,900.0	90.17	359.72	11,310.7	5,665.6	462.9	5,679.8	0.00	0.00	0.00
17,000.0	90.17	359.72	11,310.4	5,765.6	462.4	5,779.7	0.00	0.00	0.00
17,100.0	90.17	359.72	11,310.1	5,865.6	461.9	5,879.6	0.00	0.00	0.00
17,200.0	90.17	359.72	11,309.8	5,965.6	461.4	5,979.5	0.00	0.00	0.00
17,300.0	90.17	359.72	11,309.5	6,065.6	460.9	6,079.4	0.00	0.00	0.00
17,400.0	90.17	359.72	11,309.2	6,165.6	460.4	6,179.3	0.00	0.00	0.00
17,500.0	90.17	359.72	11,308.9	6,265.6	460.0	6,279.2	0.00	0.00	0.00
17,600.0	90.17	359.72	11,308.6	6,365.6	459.5	6,379.1	0.00	0.00	0.00
17,700.0	90.17	359.72	11,308.3	6,465.6	459.0	6,479.0	0.00	0.00	0.00
17,800.0	90.17	359.72	11,308.0	6,565.6	458.5	6,578.9	0.00	0.00	0.00
17,900.0	90.17	359.72	11,307.7	6,665.6	458.0	6,678.7	0.00	0.00	0.00
18,000.0	90.17	359.72	11,307.4	6,765.6	457.5	6,778.6	0.00	0.00	0.00
18,100.0	90.17	359.72	11,307.2	6,865.6	457.0	6,878.5	0.00	0.00	0.00
18,200.0	90.17	359.72	11,306.9	6,965.6	456.5	6,978.4	0.00	0.00	0.00
18,300.0	90.17	359.72	11,306.6	7,065.6	456.1	7,078.3	0.00	0.00	0.00
18,400.0	90.17	359.72	11,306.3	7,165.6	455.6	7,178.2	0.00	0.00	0.00
18,500.0	90.17	359.72	11,306.0	7,265.6	455.1	7,278.1	0.00	0.00	0.00
18,600.0	90.17	359.72	11,305.7	7,365.6	454.6	7,378.0	0.00	0.00	0.00
18,700.0	90.17	359.72	11,305.4	7,465.6	454.1	7,477.9	0.00	0.00	0.00
18,800.0	90.17	359.72	11,305.1	7,565.6	453.6	7,577.8	0.00	0.00	0.00
18,900.0	90.17	359.72	11,304.8	7,665.5	453.1	7,677.7	0.00	0.00	0.00
19,000.0	90.17	359.72	11,304.5	7,765.5	452.7	7,777.6	0.00	0.00	0.00
19,100.0	90.17	359.72	11,304.2	7,865.5	452.2	7,877.5	0.00	0.00	0.00
19,200.0	90.17	359.72	11,303.9	7,965.5	451.7	7,977.4	0.00	0.00	0.00
19,279.8	90.17	359.72	11,303.7	8,045.3	451.3	8,057.0	0.00	0.00	0.00
PPP3: 2641' FSL & 2190' FWL (Sec 15)									
19,300.0	90.17	359.72	11,303.6	8,065.5	451.2	8,077.3	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Forty Niner Ridge Unit #172H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3306.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3306.0usft (Original Well Elev)
Site:	Forty Niner Ridge Unit #172H	North Reference:	Grid
Well:	Sec 27, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 20' FNL & 2190' FWL (Sec 15)		
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)
19,400.0	90.17	359.72	11,303.3	8,165.5	450.7	8,177.2	0.00	0.00	0.00
19,500.0	90.17	359.72	11,303.1	8,265.5	450.2	8,277.1	0.00	0.00	0.00
19,600.0	90.17	359.72	11,302.8	8,365.5	449.7	8,376.9	0.00	0.00	0.00
19,700.0	90.17	359.72	11,302.5	8,465.5	449.2	8,476.8	0.00	0.00	0.00
19,800.0	90.17	359.72	11,302.2	8,565.5	448.8	8,576.7	0.00	0.00	0.00
19,900.0	90.17	359.72	11,301.9	8,665.5	448.3	8,676.6	0.00	0.00	0.00
20,000.0	90.17	359.72	11,301.6	8,765.5	447.8	8,776.5	0.00	0.00	0.00
20,100.0	90.17	359.72	11,301.3	8,865.5	447.3	8,876.4	0.00	0.00	0.00
20,200.0	90.17	359.72	11,301.0	8,965.5	446.8	8,976.3	0.00	0.00	0.00
20,300.0	90.17	359.72	11,300.7	9,065.5	446.3	9,076.2	0.00	0.00	0.00
20,400.0	90.17	359.72	11,300.4	9,165.5	445.8	9,176.1	0.00	0.00	0.00
20,500.0	90.17	359.72	11,300.1	9,265.5	445.4	9,276.0	0.00	0.00	0.00
20,600.0	90.17	359.72	11,299.8	9,365.5	444.9	9,375.9	0.00	0.00	0.00
20,604.4	90.17	359.72	11,299.8	9,369.9	444.8	9,380.3	0.00	0.00	0.00
PPP4: 1323' FNL & 2190' FWL (Sec 15)									
20,700.0	90.17	359.72	11,299.5	9,465.5	444.4	9,475.8	0.00	0.00	0.00
20,800.0	90.17	359.72	11,299.2	9,565.5	443.9	9,575.7	0.00	0.00	0.00
20,900.0	90.17	359.72	11,299.0	9,665.5	443.4	9,675.6	0.00	0.00	0.00
21,000.0	90.17	359.72	11,298.7	9,765.5	442.9	9,775.5	0.00	0.00	0.00
21,100.0	90.17	359.72	11,298.4	9,865.5	442.4	9,875.4	0.00	0.00	0.00
21,200.0	90.17	359.72	11,298.1	9,965.5	441.9	9,975.3	0.00	0.00	0.00
21,300.0	90.17	359.72	11,297.8	10,065.5	441.5	10,075.1	0.00	0.00	0.00
21,400.0	90.17	359.72	11,297.5	10,165.5	441.0	10,175.0	0.00	0.00	0.00
21,500.0	90.17	359.72	11,297.2	10,265.5	440.5	10,274.9	0.00	0.00	0.00
21,600.0	90.17	359.72	11,296.9	10,365.5	440.0	10,374.8	0.00	0.00	0.00
21,700.0	90.17	359.72	11,296.6	10,465.5	439.5	10,474.7	0.00	0.00	0.00
21,800.0	90.17	359.72	11,296.3	10,565.5	439.0	10,574.6	0.00	0.00	0.00
21,907.7	90.17	359.72	11,296.0	10,673.2	438.5	10,682.2	0.00	0.00	0.00
BHL: 20' FNL & 2190' FWL (Sec 15)									

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Forty Niner Ridge Unit #172H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3306.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3306.0usft (Original Well Elev)
Site:	Forty Niner Ridge Unit #172H	North Reference:	Grid
Well:	Sec 27, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 20' FNL & 2190' FWL (Sec 15)		
Design:	Design #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
SHL: 100' FNL & 1700' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	466,964.70	683,872.70	32.2829178	-103.8721049
KOP: 243' FNL & 2190' I - plan hits target center - Point	0.00	0.00	10,753.0	-140.3	491.1	466,824.42	684,363.82	32.2825264	-103.8705177
BHL: 20' FNL & 2190' FV - plan hits target center - Point	0.00	0.00	11,296.0	10,673.2	438.5	477,637.90	684,311.20	32.3122509	-103.8705370
PPP3: 1323' FNL & 2190' FV - plan hits target center - Point	0.00	0.00	11,299.8	9,369.9	444.8	476,334.63	684,317.54	32.3086684	-103.8705346
PPP3: 2641' FSL & 2190' FV - plan hits target center - Point	0.00	0.00	11,303.7	8,045.3	451.3	475,010.00	684,323.99	32.3050273	-103.8705323
PPP2: 0' FSL & 2190' FV - plan hits target center - Point	0.00	0.00	11,311.5	5,397.8	464.2	472,362.51	684,336.87	32.2977497	-103.8705276
FTP/LP: 330' FSL & 2190' FV - plan hits target center - Point	0.00	0.00	11,326.0	432.7	488.3	467,397.41	684,361.04	32.2841014	-103.8705187

Mewbourne Oil Company, Forty Niner Ridge Unit #172H
Sec 27, T23S, R30E
SHL: 100' FNL & 1700' FWL (Sec 27)
BHL: 20' FNL & 2190' FWL (Sec 15)

Casing Program

Hole Size	From	To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.500	0'	410'	13.375	48.0	H40	STC	4.10	9.22	16.36	27.49
12.250	0'	3453'	9.625	36.0	J55	LTC	1.13	1.96	3.48	4.33
12.250	3453'	3600'	9.625	40.0	J55	LTC	1.37	2.11	88.43	107.14
8.750	0'	10767'	7.000	26.0	P110	LTC	1.15	1.83	2.48	2.96
6.125	10567'	21908'	4.500	13.5	P110	LTC	1.51	1.76	2.21	2.76
BLM Minimum Safety Factor							1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h. 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 rd string cement tied back 500' into previous casing?				
Is well located in R-111-P and SOPA?				Y
If yes, are the first three strings cemented to surface?				Y
Is 2 nd string set 100' to 600' below the base of salt?				Y
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.				N
Is an engineered weak point used to satisfy R-111-Q?				N
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?				
Formation	Est. Top		Formation	Est. Top
Rustler			Delaware (Lamar)	3715'
Salt Top	460'		Bell Canyon	3740
Salt Base	3525'		Cherry Canyon	4665'
Yates			Manzanita Marker	4815'
Seven Rivers			Basal Brushy Canyon	5940'
Queen			Bone Spring	7590'
Capitan			1st Bone Spring Sand	8540'
Grayburg			2nd Bone Spring Sand	9215'
San Andres			3rd Bone Spring Sand	10465'
Glorieta			Abo	
Yeso			Wolfcamp	10890'

Mewbourne Oil Company, Forty Niner Ridge Unit #172H
Sec 27, T23S, R30E
SHL: 100' FNL & 1700' FWL (Sec 27)
BHL: 20' FNL & 2190' FWL (Sec 15)

Cementing Program

Csg	Top MD	Bottom MD	# Sks	Yield (ft3/sk)	Density (ppg)	Vol (ft3)	% Excess	Slurry Description
Surface (Lead)	0'	223'	150	2.12	12.5	320	100	Class C, Salt, Gel, Extender, LCM
Surface (Tail)	223'	410'	200	1.34	14.8	268	100	Class C, Retarder
Intermediate (Lead)	0'	3022'	660	2.12	12.5	1400	50	Class C, Salt, Gel, Extender, LCM
Intermediate (Tail)	3022'	3600'	200	1.34	14.8	268	50	Class C, Retarder
Production (Lead)	0'	5126'	740	2.12	12.5	1570	25	Class C, Salt, Gel, Extender, LCM, Defoamer
Production (Tail)	5126'	10767'	400	1.18	15.6	472	25	Class C, Retarder
Liner	10567'	21908'	730	1.85	13.5	1360	25	Class H, Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	410	FW Gel	8.6-8.8	28-34	N/C
410	3600	Saturated Brine	10.0	28-34	N/C
3600	10767	Cut Brine	8.6-9.7	28-34	N/C
10767	21908	OBM	10.0-12.0	30-40	<10cc

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

Mewbourne Oil Company, Forty Niner Ridge Unit #172H
Sec 27, T23S, R30E
SHL: 100' FNL & 1700' FWL (Sec 27)
BHL: 20' FNL & 2190' FWL (Sec 15)

Additional Information

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Forty Niner Ridge Unit	#172H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	27	23S	30E	-	243'	FNL	2190'	FWL	Eddy
Latitude					Longitude			NAD	
32.2825264					-103.8705177			83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
N	22	23S	30E	-	330'	FSL	2190'	FWL	Eddy
Latitude					Longitude			NAD	
32.2841014					-103.8705187			83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	15	23S	30E	-	20'	FNL	2190'	FWL	Eddy
Latitude					Longitude			NAD	
32.3122509					-103.8705369			83	

Is this well the defining well for the Horizontal Spacing Unit?

Y

Is this well an infill well?

N

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	NMNM0531277
WELL NAME & NO.:	FORTY NINER RIDGE UNIT 172H
SURFACE HOLE FOOTAGE:	100'N & 1700'W
BOTTOM HOLE FOOTAGE:	20'N & 2190'W
LOCATION:	Section 27, T.23 S., R.30 E., NMP
COUNTY:	EDDY County, New Mexico

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit

All Previous COAs Still Apply.

A. CASING

Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **410** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) 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 **24 hours in the Potash Area** 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 **9-5/8** inch intermediate casing which shall be set at approximately **3,600** feet 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 potash.
 - ❖ In Medium 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 Secretary Potash 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 R111 Potash Areas if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.
 3. The minimum required fill of cement behind the **7** inch production casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
Excess cement calculates to 22%, additional cement might be required.
 4. 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.

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.
 - 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 OOGO2.III.A.2.i must be followed.

C. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months. (This is not necessary for secondary recovery unit wells)

OTA05222023

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 224151

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 224151
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Original COA's still apply	10/20/2023