

Well Name: FNR FEDERAL UNIT	Well Location: T23S / R30E / SEC 17 / SWNW / 32.3081888 / -103.9091811	County or Parish/State: EDDY / NM
Well Number: 34H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM114355	Unit or CA Name: FNR UNIT	Unit or CA Number: NMNM135781X
US Well Number:	Operator: MEWBOURNE OIL COMPANY	

Notice of Intent

Sundry ID: 2799076

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 07/05/2024	Time Sundry Submitted: 02:18
Date proposed operation will begin: 07/05/2024	

Procedure Description: Mewbourne Oil Company request that the following changes be made to the approved APD for the FNR Federal Unit #34H (APD ID: 10400087902)... Change dedicated acreage from 320 acres to 720 acres Change field and pool from Forty Niner Ridge; Bone Spring to Purple Sage; Wolfcamp Change BHL from 100' FNL & 1920' FWL (Sec 5) to 330' FNL & 2310 FWL (Sec 5) Change 9 5/8" casing set depth from 3300' to 3380' Attached is a cross section showing that the salt base and Delaware are different than we initially showed.

NOI Attachments

Procedure Description

- FNR_Federal_Unit__34H_CsgAssumptions_20240705141751.pdf
- FNR_Federal_Unit__34H_AddInfo_20240705141733.pdf
- FNR_Federal_Unit__34H_R_111Q_Variance_20240705141652.pdf
- FNR_FEDERAL_UNIT__34H_Dir_Plot_20240705141643.pdf
- FNR_FEDERAL_UNIT__34H_Dir_Plan_20240705141629.pdf
- FNR_Cross_section_20240705141612.pdf
- FNR_plot_20240705141602.pdf
- FNR_FEDERAL_UNIT__34H_C102_20240705141507.pdf

Received by OCD: 7/16/2024 7:17:54 AM

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Well Name: FNR FEDERAL UNIT	Well Location: T23S / R30E / SEC 17 / SWNW / 32.3081888 / -103.9091811	County or Parish/State: EDDY / NM
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Lease Number: NMNM114355	Unit or CA Name: FNR UNIT	Unit or CA Number: NMNM135781X
US Well Number:	Operator: MEWBOURNE OIL COMPANY	

Conditions of Approval

Additional

Marker_Bed_126_20240711111220.pdf
FNR_FEDERAL_UNIT_34H_Sundry_2799076_COA_20240711111220.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 05, 2024 02:17 PM

Name: MEWBOURNE OIL COMPANY

Title: ENGINEER

Street Address: 901 W TAOS ST

City: HOBBSState: 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: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 07/15/2024

Signature: Chris Walls

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 <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		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 <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> 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"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Subsequent Report	<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"/> Final Abandonment Notice	<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: SWNW / 1500 FNL / 970 FWL / TWSP: 23S / RANGE: 30E / SECTION: 17 / LAT: 32.3081888 / LONG: -103.9091811 (TVD: 0 feet, MD: 0 feet)
PPP: SESW / 0 FSL / 1920 FWL / TWSP: 23S / RANGE: 30E / SECTION: 8 / LAT: 32.3123304 / LONG: -103.9060941 (TVD: 9918 feet, MD: 11658 feet)
PPP: NENW / 1323 FNL / 1920 FWL / TWSP: 23S / RANGE: 30E / SECTION: 17 / LAT: 32.3086943 / LONG: -103.9061006 (TVD: 9918 feet, MD: 10335 feet)
PPP: SESW / 0 FSL / 1920 FWL / TWSP: 23S / RANGE: 30E / SECTION: 5 / LAT: 32.3268854 / LONG: -103.9060681 (TVD: 9918 feet, MD: 16953 feet)
BHL: NENW / 100 FNL / 1920 FWL / TWSP: 23S / RANGE: 30E / SECTION: 5 / LAT: 32.3412 / LONG: -103.9060427 (TVD: 9918 feet, MD: 22160 feet)

CONFIDENTIAL

Akhtarmanesh, Saman

From: Carter Crook <ccrook@mewbourne.com>
Sent: Wednesday, July 10, 2024 8:37 AM
To: Akhtarmanesh, Saman
Subject: [EXTERNAL] FW: FNR 35H

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

From: John Deans <jdeans@mewbourne.com>
Sent: Tuesday, April 30, 2024 1:47 PM
To: Carter Crook <ccrook@mewbourne.com>
Cc: Kyle Taylor <ktaylor@mewbourne.com>
Subject: FNR 35H

Here is the updated estimated tops for the FNR 35H and 28H, not as much of a difference as I expected.

	35H		28H
Top of Salt	409		414
MB 126	1065		1066
Base of Salt	3247		3249
Delaware	3461		3463

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
WELL NAME & NO.:	FNR FEDERAL UNIT 34H
APD ID:	10400087902
LOCATION:	Section 17, T.23 S., R.30 E. NMP
COUNTY:	Eddy County, New Mexico ▼

COA

H ₂ S	<input type="radio"/> No <input checked="" type="radio"/> Yes			
Potash / WIPP	<input type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-Q	<input checked="" type="checkbox"/> Open Annulus 3-String Design: Open Production Casing Annulus <input type="checkbox"/> WIPP
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 checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input checked="" type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input checked="" type="checkbox"/> DV Tool
Special Req	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Waste Prev.	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Man. 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 type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	

SEE ORIGINAL COA FOR ALL OTHER REQUIREMENTS.

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated **at spud**. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

APD is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the Order No. R-111-Q.

B. CASING

Primary Casing Program

1. The 13-3/8 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. **If salt is encountered, set the casing at least 25 ft. above the salt.**

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified

- and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **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 **9-5/8 in.** intermediate casing shall be set in a competent bed at approximately **3,380 ft.** The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
- **Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.

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

Note: The operator shall follow all applicable requirements in the Order No. R-111-Q. The minimum additives/characteristics of cement slurry as well as centralizer program prescribed for the 1st intermediate casing shall be in accordance with the Order No. R-111-Q.

3. Operator has proposed to set **7-inch** 26# **HCP-110** production casing at approximately **10,347 ft.** (10,276 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:
- Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage within 180 days after well completion in accordance with the R-111-Q guidelines.
 - a. First stage: Operator will cement production casing with intent to bring cement to top of Brushy Canyon formation. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst and Potash.
 - b. Second stage: Operator will perform bradenhead squeeze within 180 days after completion per R-111-Q requirements. Cement shall be tie-back **at least 500 ft. into intermediate casing and below the Marker Bed 126.** If cement does not circulate, the appropriate BLM office shall be notified.
 - ❖ Operator must run a cement evaluation tool (fluid shot tool, Temperature log or CBL, etc.) to verify TOC after the second stage bradenhead. Submit the results to the BLM. If cement does not tie-back at least 500 ft. into the previous casing shoe, the appropriate BLM office shall be notified.
 - ❖ A monitored open annulus will be incorporated during completion by leaving the Intermediate Casing x Production Casing annulus un-cemented and monitored inside the

Intermediate String. Operator must follow monitoring requirements listed within R-111-Q. Tieback requirements shall be met within 180 days.

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.

Alternate Casing Program

1. The **13-3/8 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. **If salt is encountered, set the casing at least 25 ft. above the salt.**
 - e. 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.
 - f. 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)
 - g. 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.
 - h. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8 in.** intermediate casing shall be set in a competent bed at approximately **3,380 ft.** The minimum required fill of cement behind the **9-5/8 inch** intermediate casing is:
 - **Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.

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

Note: The operator shall follow all applicable requirements in the Order No. R-111-Q. The minimum additives/characteristics of cement slurry as well as centralizer program prescribed for the 1st intermediate casing shall be in accordance with the Order No. R-111-Q.

3. Operator has proposed to set **7-inch 26# HCP-110** production casing at approximately **11,050 ft.** (10,784 ft. TVD). The minimum required fill of cement behind the **7 inch** production casing is:
 - Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage within 180 days after well completion in accordance with the R-111-Q guidelines.

- c. First stage: Operator will cement production casing with intent to bring cement to top of Brushy Canyon formation. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst and Potash.
 - d. Second stage: Operator will perform bradenhead squeeze within 180 days after completion per R-111-Q requirements. Cement shall be tie-back **at least 500 ft. into intermediate casing and below the Marker Bed 126**. If cement does not circulate, the appropriate BLM office shall be notified.
- ❖ Operator must run a cement evaluation tool (fluid shot tool, Temperature log or CBL, etc.) to verify TOC after the second stage bradenhead. Submit the results to the BLM. If cement does not tie-back at least 500 ft. into the previous casing shoe, the appropriate BLM office shall be notified.
 - ❖ A monitored open annulus will be incorporated during completion by leaving the Intermediate Casing x Production Casing annulus un-cemented and monitored inside the Intermediate String. Operator must follow monitoring requirements listed within R-111-Q. Tieback requirements shall be met within 180 days.
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.

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 surface casing shoe shall be **5000 (5M) psi**. Before drilling out surface casing shoe, BOP/ BOPE and annular preventer must be pressure tested in accordance with **title 43 CFR 3172 and API Standard 53**.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

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

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

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

D. 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)**

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 doghouse or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the

hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP 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.

SA 07/11/2024

Mewbourne Oil Company, FNR Federal Unit #34H

Sec 17, T23S, R30E

SHL: 1500' FNL 970' FWL (Sec 17)

BHL: 330' FNL 2310' FWL (Sec 5)

Casing Program Design A						BLM Minimum Safety Factors	1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	375'	375'	13.375" 48# H40 STC	4.59	10.32	17.89	30.06
Int	12.25"	0'	0'	3200'	3200'	9.625" 36# J55 LTC	1.16	2.01	3.69	4.60
Int	12.25"	3200'	3200'	3385'	3385'	9.625" 40# J55 LTC	1.39	2.14	70.27	85.14
Production	8.75"	0'	0'	10347'	10276'	7" 26# HCP110 LTC	1.39	1.77	2.58	3.09
Liner	6.125"	10147'	10105'	22566'	10818'	4.5" 13.5# P110 LTC	1.58	1.84	2.02	2.52

Casing		# Sacks	Wt. lb/gal	Yield ft ³ /sack	TOC/BOC	Volume ft ³	% Excess	Slurry Description
13.375 in	LEAD	120	12.5	2.12	0' - 185'	260	100%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	185' - 375'	268		Class C: Retarder
9.625 in	LEAD	500	12.5	2.12	0' - 2702'	1060	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	2702' - 3385'	268		Class C: Retarder
7 in	LEAD	240	12.5	2.12	3885' - 7241'	510	0%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	400	15.6	1.18	7241' - 10346.6'	472		Class H: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	790	13.5	1.85	10146.6' - 22566'	1470	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer settling Agent

Design A - Mud Program		
Depth	Mud Wt	Mud Type
	8.4 - 8.6	
0' - 375'	8.4 - 8.6	Fresh Water
375' - 3385'	9.5 - 10.5	Brine
3385' - 10346.6'	8.6 - 10.5	Cut-Brine
10346.6' - 22566'	10.0 - 12.	OBM

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)	3461'	Oil/Natural Gas
Salt Top	409'	None	Bell Canyon	3385'	Oil/Natural Gas
Salt Base	3247'	None	Cherry Canyon	4250'	Oil/Natural Gas
Yates			Manzanita Marker	4480'	Oil/Natural Gas
Seven Rivers			Basal Brushy Canyon	5855'	Oil/Natural Gas
Queen			Bone Spring	7150'	Oil/Natural Gas
Capitan			1st Bone Spring	8170'	Oil/Natural Gas
Grayburg			2nd Bone Spring	8540'	Oil/Natural Gas
San Andres			3rd Bone Spring	10080'	Oil/Natural Gas
Glorieta			Wolfcamp	10630'	Oil/Natural Gas

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

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-Q?	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-Q and SOPA?	Y
If yes, are the first three strings cemented to surface?	N
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.	Y
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, FNR Federal Unit #34H
Sec 17, T23S, R30E
SHL: 1500' FNL 970' FWL (Sec 17)
BHL: 330' FNL 2310' FWL (Sec 5)

Casing Program Design B						BLM Minimum Safety Factors	1.125	1.0	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	375'	375'	13.375" 48# H40 STC	4.59	10.32	17.89	30.06
Int	12.25"	0'	0'	3200'	3200'	9.625" 36# J55 LTC	1.16	2.01	3.69	4.60
Int	12.25"	3200'	3200'	3385'	3385'	9.625" 40# J55 LTC	1.39	2.14	70.27	85.14
Production	8.75"	0'	0'	11050'	10784'	7" 26# HCP110 LTC	1.32	1.69	2.41	2.89
Liner	6.125"	10347'	10276'	22566'	10818'	4.5" 13.5# P110 LTC	1.58	1.84	2.05	2.56

Design B - Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft³/sack	TOC/BOC	Volume ft³	% Excess	Slurry Description
13.375 in	LEAD	120	12.5	2.12	0' - 185'	260	100%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	185' - 375'	268		Class C: Retarder
9.625 in	LEAD	500	12.5	2.12	0' - 2702'	1060	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	2702' - 3385'	268		Class C: Retarder
7 in	LEAD	290	12.5	2.12	3385' - 7953'	620	0%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	400	15.6	1.18	7953' - 11050'	472		Class H: Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	780	13.5	1.85	10346.6' - 22566'	1450	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer settling Agent

Design B - Mud Program

Depth	Mud Wt	Mud Type
0' - 375'	8.4 - 8.6	Fresh Water
375' - 3385'	8.4 - 8.6	
3385' - 11050'	8.6 - 10.5	Cut-Brine
11050' - 22566'	10.0 - 12.	OBM

Geology

Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler	409'	None	Yeso	3461'	Oil/Natural Gas
Castile			Delaware (Lamar)		
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates	3247'	None	Manzanita Marker	4480'	Oil/Natural Gas
Seven Rivers			Basal Brushy Canyon	5855'	Oil/Natural Gas
Queen			Bone Spring	7150'	Oil/Natural Gas
Capitan			1st Bone Spring	8170'	Oil/Natural Gas
Grayburg	San Andres		2nd Bone Spring	8540'	Oil/Natural Gas
San Andres			3rd Bone Spring	10080'	Oil/Natural Gas
Glorieta			Wolfcamp	10630'	Oil/Natural Gas

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

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-Q?	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-Q and SOPA?	Y
If yes, are the first three strings cemented to surface?	N
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.	Y
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, FNR Federal Unit #34H
Sec 17, T23S, R30E
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BHL: 330' FNL 2310' FWL (Sec 5)

r, Anti-

Mewbourne Oil Company, FNR Federal Unit #34H
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Mewbourne Oil Company, FNR Federal Unit #34H

Sec 17, T23S, R30E

SHL: 1500' FNL 970' FWL (Sec 17)

BHL: 330' FNL 2310' FWL (Sec 5)

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	FNR Federal Unit	#34H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
F	17	23	30	-	1623'	FNL	2310'	FWL	Eddy
Latitude					Longitude			NAD	
32.3078769					-103.9048425			83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
K	17	23	30	-	1050'	FNL	2310'	FWL	Eddy
Latitude					Longitude			NAD	
32.309452					-103.9048397			83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	5	23	30	-	330'	FNL	2310'	FWL	Eddy
Latitude					Longitude			NAD	
32.3405651					-103.9047835			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

Mewbourne Oil Company, FNR Federal Unit #34H
Sec 17, T23S, R30E
SHL: 1500' FNL 970' FWL (Sec 17)
BHL: 330' FNL 2310' FWL (Sec 5)

Casing Program Design A						BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry
									1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	375'	375'	13.375" 48# H40 STC	4.59	10.32	17.89	30.06
Int	12.25"	0'	0'	3200'	3200'	9.625" 36# J55 LTC	1.16	2.01	3.69	4.60
Int	12.25"	3200'	3200'	3385'	3385'	9.625" 40# J55 LTC	1.39	2.14	70.27	85.14
Production	8.75"	0'	0'	10347'	10276'	7" 26# HCP110 LTC	1.39	1.77	2.58	3.09
Liner	6.125"	10147'	10105'	22566'	10818'	4.5" 13.5# P110 LTC	1.58	1.84	2.02	2.52

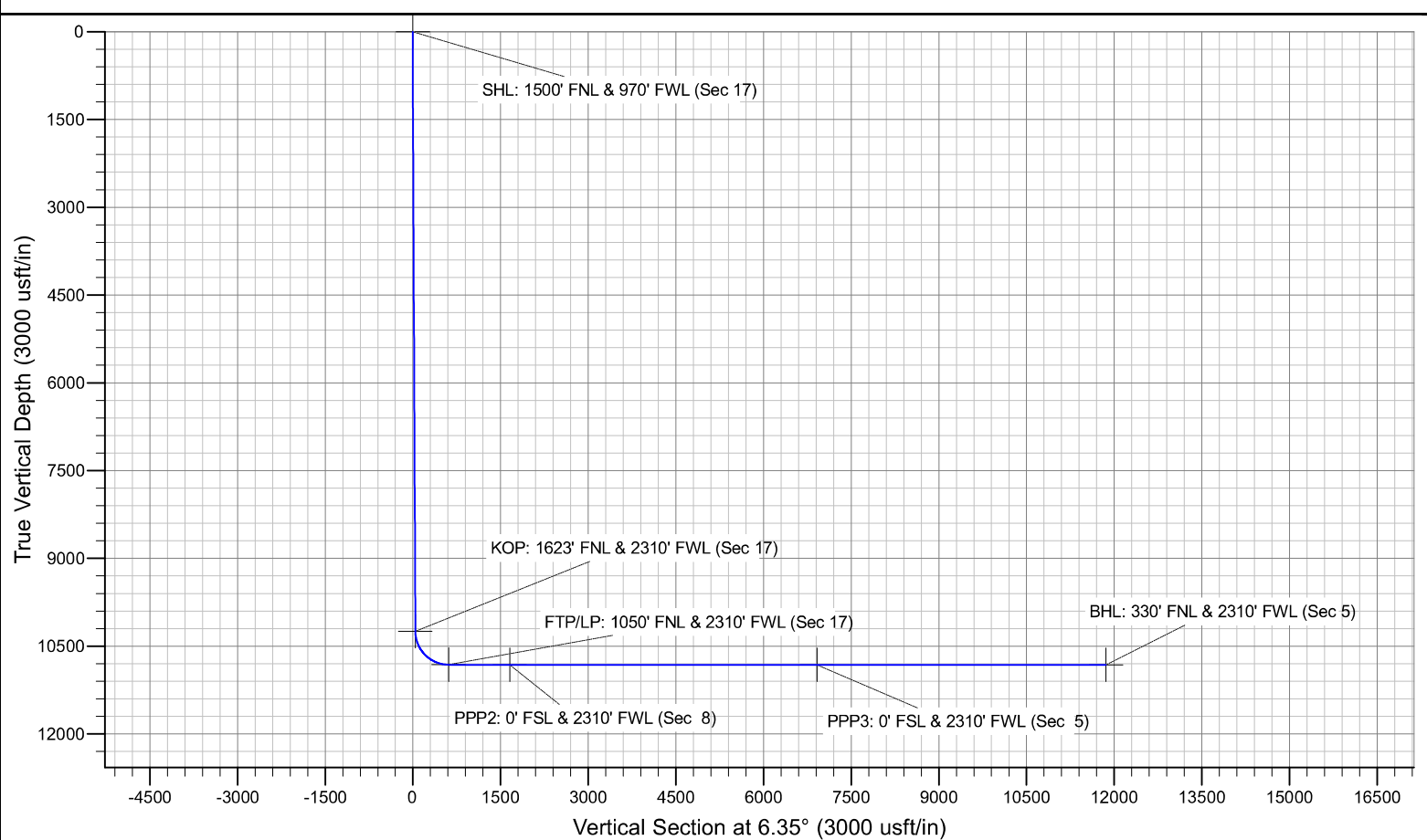
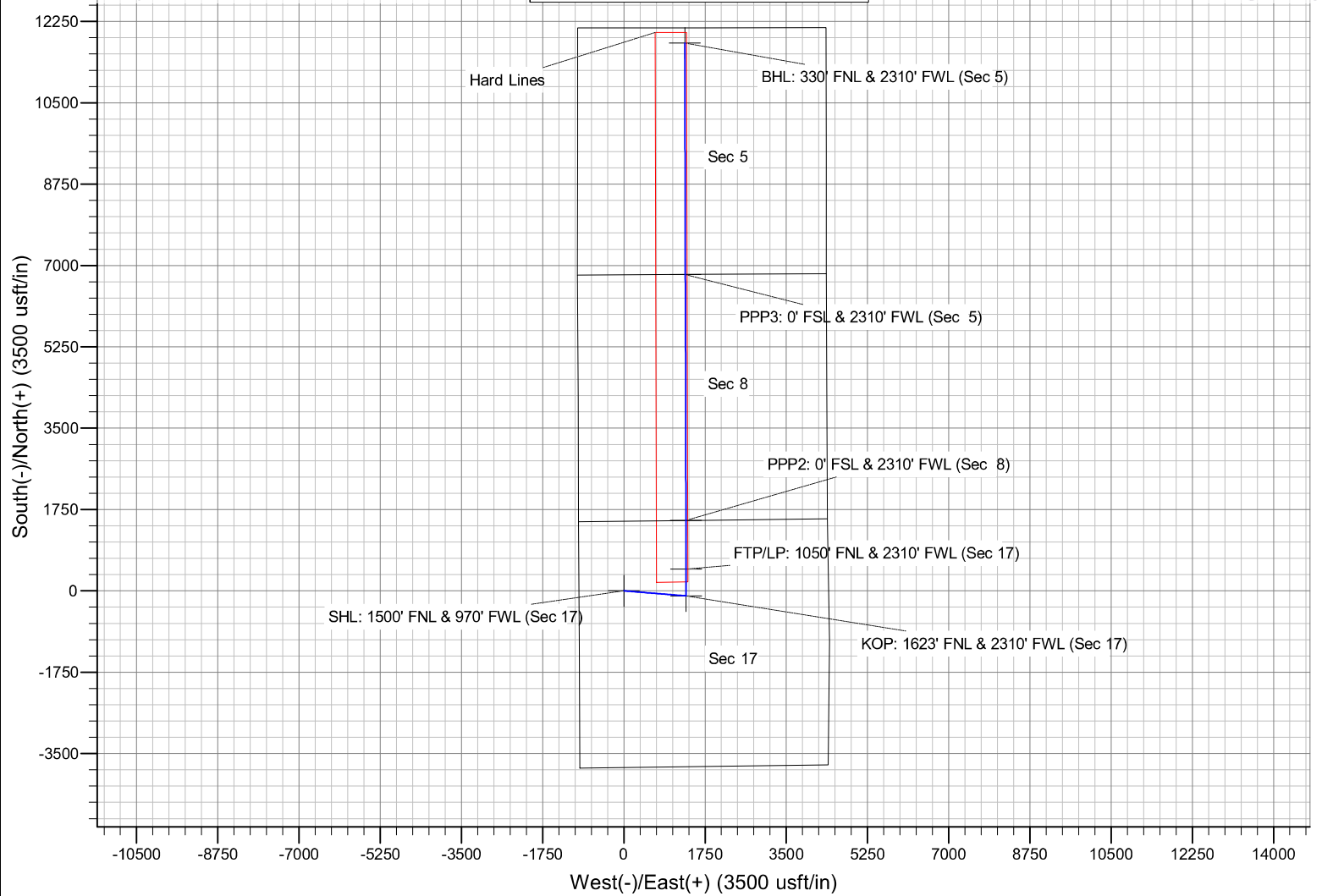
Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft³/sack	TOC/BOC	Volume ft³	% Excess	Slurry Description
13.375 in	LEAD	120	12.5	2.12	0' - 185'	260	100%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	185' - 375'	268		Class C: Retarder
9.625 in	LEAD	500	12.5	2.12	0' - 2702'	1060	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	2702' - 3385'	268		Class C: Retarder
7 in	LEAD	240	12.5	2.12	3885' - 7241'	510	0%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	400	15.6	1.18	7241' - 10346.6'	472		Class H: Retarder, Fluid Loss, Defoamer
7" TOC @ 3885', BHS TOC @ 2885'								
Braden Head Sqz	LEAD	140	14.8	1.34	2885' - 3885'	190	25%	Class C
4.5 in	LEAD	790	13.5	1.85	10146.6' - 22566'	1470	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Casing Program Design B						BLM Minimum Safety Factors	1.125	1.0	1.6 Dry	1.6 Dry
									1.8 Wet	1.8 Wet
String	Hole Size	Top MD	Top TVD	Bot MD	Bot TVD	Csg. Size	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
Surface	17.5"	0'	0'	375'	375'	13.375" 48# H40 STC	4.59	10.32	17.89	30.06
Int	12.25"	0'	0'	3200'	3200'	9.625" 36# J55 LTC	1.16	2.01	3.69	4.60
Int	12.25"	3200'	3200'	3385'	3385'	9.625" 40# J55 LTC	1.39	2.14	70.27	85.14
Production	8.75"	0'	0'	11050'	10784'	7" 26# HCP110 LTC	1.32	1.69	2.41	2.89
Liner	6.125"	10347'	10276'	22566'	10818'	4.5" 13.5# P110 LTC	1.58	1.84	2.05	2.56

Design B - Cement Program

Casing		# Sacks	Wt. lb/gal	Yield ft³/sack	TOC/BOC	Volume ft³	% Excess	Slurry Description
13.375 in	LEAD	120	12.5	2.12	0' - 185'	260	100%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	185' - 375'	268		Class C: Retarder
9.625 in	LEAD	500	12.5	2.12	0' - 2702'	1060	25%	Class C: Salt, Gel, Extender, LCM
	TAIL	200	14.8	1.34	2702' - 3385'	268		Class C: Retarder
7 in	LEAD	290	12.5	2.12	3885' - 7953'	620	0%	Class C: Salt, Gel, Extender, LCM, Defoamer
	TAIL	400	15.6	1.18	7953' - 11050'	472		Class H: Retarder, Fluid Loss, Defoamer
7" TOC @ 3885', BHS TOC @ 2885'								
Braden Head Sqz	LEAD	140	14.8	1.34	2885' - 3885'	190	25%	Class C
4.5 in	LEAD	780	13.5	1.85	10346.6' - 22566'	1450	25%	Class H: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent



Mewbourne Oil Company

Eddy County, New Mexico NAD 83

FNR Federal Unit #34H

Sec 17, T23S, R30E

SHL: 1500' FNL & 970' FWL (Sec 17)

BHL: 330' FNL & 2310' FWL (Sec 5)

Plan: Design #1

Standard Planning Report

23 May, 2024

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site FNR Federal Unit #34H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3178.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3178.0usft (Original Well Elev)
Site:	FNR Federal Unit #34H	North Reference:	Grid
Well:	Sec 17, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 2310' FWL (Sec 5)		
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	FNR Federal Unit #34H		
Site Position:		Northing:	476,110.70 usft
From:	Map	Easting:	672,378.50 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32.3081887
		Longitude:	-103.9091809

Well	Sec 17, T23S, R30E		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	3,178.0 usft
Grid Convergence:	0.23 °	Ground Level:	3,150.0 usft
		Latitude:	32.3081887
		Longitude:	-103.9091809

Wellbore	BHL: 330' FNL & 2310' FWL (Sec 5)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.31	60.12	48,253.15266144

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	6.35

Plan Survey Tool Program	Date	5/23/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,565.5	Design #1 (BHL: 330' FNL & 2310	

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	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,539.2	8.78	94.61	1,537.5	-2.7	33.5	2.00	2.00	0.00	94.61	
9,907.4	8.78	94.61	9,807.5	-105.4	1,307.3	0.00	0.00	0.00	0.00	
10,346.6	0.00	0.00	10,245.0	-108.1	1,340.8	2.00	-2.00	0.00	180.00	KOP: 1623' FNL & 23
11,246.7	90.00	359.86	10,818.0	464.9	1,339.4	10.00	10.00	0.00	-0.14	
22,565.5	90.00	359.86	10,818.0	11,783.7	1,311.5	0.00	0.00	0.00	0.00	BHL: 330' FNL & 2310

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site FNR Federal Unit #34H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3178.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3178.0usft (Original Well Elev)
Site:	FNR Federal Unit #34H	North Reference:	Grid
Well:	Sec 17, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 2310' FWL (Sec 5)		
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: 1500' FNL & 970' FWL (Sec 17)									
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	2.00	94.61	1,200.0	-0.1	1.7	0.1	2.00	2.00	0.00
1,300.0	4.00	94.61	1,299.8	-0.6	7.0	0.2	2.00	2.00	0.00
1,400.0	6.00	94.61	1,399.5	-1.3	15.6	0.5	2.00	2.00	0.00
1,500.0	8.00	94.61	1,498.7	-2.2	27.8	0.8	2.00	2.00	0.00
1,539.2	8.78	94.61	1,537.5	-2.7	33.5	1.0	2.00	2.00	0.00
1,600.0	8.78	94.61	1,597.6	-3.4	42.7	1.3	0.00	0.00	0.00
1,700.0	8.78	94.61	1,696.4	-4.7	58.0	1.8	0.00	0.00	0.00
1,800.0	8.78	94.61	1,795.2	-5.9	73.2	2.2	0.00	0.00	0.00
1,900.0	8.78	94.61	1,894.0	-7.1	88.4	2.7	0.00	0.00	0.00
2,000.0	8.78	94.61	1,992.9	-8.4	103.6	3.2	0.00	0.00	0.00
2,100.0	8.78	94.61	2,091.7	-9.6	118.9	3.6	0.00	0.00	0.00
2,200.0	8.78	94.61	2,190.5	-10.8	134.1	4.1	0.00	0.00	0.00
2,300.0	8.78	94.61	2,289.4	-12.0	149.3	4.6	0.00	0.00	0.00
2,400.0	8.78	94.61	2,388.2	-13.3	164.5	5.0	0.00	0.00	0.00
2,500.0	8.78	94.61	2,487.0	-14.5	179.7	5.5	0.00	0.00	0.00
2,600.0	8.78	94.61	2,585.8	-15.7	195.0	5.9	0.00	0.00	0.00
2,700.0	8.78	94.61	2,684.7	-16.9	210.2	6.4	0.00	0.00	0.00
2,800.0	8.78	94.61	2,783.5	-18.2	225.4	6.9	0.00	0.00	0.00
2,900.0	8.78	94.61	2,882.3	-19.4	240.6	7.3	0.00	0.00	0.00
3,000.0	8.78	94.61	2,981.1	-20.6	255.9	7.8	0.00	0.00	0.00
3,100.0	8.78	94.61	3,080.0	-21.9	271.1	8.3	0.00	0.00	0.00
3,200.0	8.78	94.61	3,178.8	-23.1	286.3	8.7	0.00	0.00	0.00
3,300.0	8.78	94.61	3,277.6	-24.3	301.5	9.2	0.00	0.00	0.00
3,400.0	8.78	94.61	3,376.5	-25.5	316.7	9.7	0.00	0.00	0.00
3,500.0	8.78	94.61	3,475.3	-26.8	332.0	10.1	0.00	0.00	0.00
3,600.0	8.78	94.61	3,574.1	-28.0	347.2	10.6	0.00	0.00	0.00
3,700.0	8.78	94.61	3,672.9	-29.2	362.4	11.0	0.00	0.00	0.00
3,800.0	8.78	94.61	3,771.8	-30.4	377.6	11.5	0.00	0.00	0.00
3,900.0	8.78	94.61	3,870.6	-31.7	392.9	12.0	0.00	0.00	0.00
4,000.0	8.78	94.61	3,969.4	-32.9	408.1	12.4	0.00	0.00	0.00
4,100.0	8.78	94.61	4,068.2	-34.1	423.3	12.9	0.00	0.00	0.00
4,200.0	8.78	94.61	4,167.1	-35.4	438.5	13.4	0.00	0.00	0.00
4,300.0	8.78	94.61	4,265.9	-36.6	453.7	13.8	0.00	0.00	0.00
4,400.0	8.78	94.61	4,364.7	-37.8	469.0	14.3	0.00	0.00	0.00
4,500.0	8.78	94.61	4,463.6	-39.0	484.2	14.8	0.00	0.00	0.00
4,600.0	8.78	94.61	4,562.4	-40.3	499.4	15.2	0.00	0.00	0.00
4,700.0	8.78	94.61	4,661.2	-41.5	514.6	15.7	0.00	0.00	0.00
4,800.0	8.78	94.61	4,760.0	-42.7	529.9	16.2	0.00	0.00	0.00
4,900.0	8.78	94.61	4,858.9	-43.9	545.1	16.6	0.00	0.00	0.00
5,000.0	8.78	94.61	4,957.7	-45.2	560.3	17.1	0.00	0.00	0.00
5,100.0	8.78	94.61	5,056.5	-46.4	575.5	17.5	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site FNR Federal Unit #34H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3178.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3178.0usft (Original Well Elev)
Site:	FNR Federal Unit #34H	North Reference:	Grid
Well:	Sec 17, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 2310' FWL (Sec 5)		
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)
5,200.0	8.78	94.61	5,155.3	-47.6	590.7	18.0	0.00	0.00	0.00
5,300.0	8.78	94.61	5,254.2	-48.9	606.0	18.5	0.00	0.00	0.00
5,400.0	8.78	94.61	5,353.0	-50.1	621.2	18.9	0.00	0.00	0.00
5,500.0	8.78	94.61	5,451.8	-51.3	636.4	19.4	0.00	0.00	0.00
5,600.0	8.78	94.61	5,550.6	-52.5	651.6	19.9	0.00	0.00	0.00
5,700.0	8.78	94.61	5,649.5	-53.8	666.9	20.3	0.00	0.00	0.00
5,800.0	8.78	94.61	5,748.3	-55.0	682.1	20.8	0.00	0.00	0.00
5,900.0	8.78	94.61	5,847.1	-56.2	697.3	21.3	0.00	0.00	0.00
6,000.0	8.78	94.61	5,946.0	-57.4	712.5	21.7	0.00	0.00	0.00
6,100.0	8.78	94.61	6,044.8	-58.7	727.7	22.2	0.00	0.00	0.00
6,200.0	8.78	94.61	6,143.6	-59.9	743.0	22.7	0.00	0.00	0.00
6,300.0	8.78	94.61	6,242.4	-61.1	758.2	23.1	0.00	0.00	0.00
6,400.0	8.78	94.61	6,341.3	-62.4	773.4	23.6	0.00	0.00	0.00
6,500.0	8.78	94.61	6,440.1	-63.6	788.6	24.0	0.00	0.00	0.00
6,600.0	8.78	94.61	6,538.9	-64.8	803.9	24.5	0.00	0.00	0.00
6,700.0	8.78	94.61	6,637.7	-66.0	819.1	25.0	0.00	0.00	0.00
6,800.0	8.78	94.61	6,736.6	-67.3	834.3	25.4	0.00	0.00	0.00
6,900.0	8.78	94.61	6,835.4	-68.5	849.5	25.9	0.00	0.00	0.00
7,000.0	8.78	94.61	6,934.2	-69.7	864.7	26.4	0.00	0.00	0.00
7,100.0	8.78	94.61	7,033.1	-70.9	880.0	26.8	0.00	0.00	0.00
7,200.0	8.78	94.61	7,131.9	-72.2	895.2	27.3	0.00	0.00	0.00
7,300.0	8.78	94.61	7,230.7	-73.4	910.4	27.8	0.00	0.00	0.00
7,400.0	8.78	94.61	7,329.5	-74.6	925.6	28.2	0.00	0.00	0.00
7,500.0	8.78	94.61	7,428.4	-75.9	940.9	28.7	0.00	0.00	0.00
7,600.0	8.78	94.61	7,527.2	-77.1	956.1	29.1	0.00	0.00	0.00
7,700.0	8.78	94.61	7,626.0	-78.3	971.3	29.6	0.00	0.00	0.00
7,800.0	8.78	94.61	7,724.8	-79.5	986.5	30.1	0.00	0.00	0.00
7,900.0	8.78	94.61	7,823.7	-80.8	1,001.7	30.5	0.00	0.00	0.00
8,000.0	8.78	94.61	7,922.5	-82.0	1,017.0	31.0	0.00	0.00	0.00
8,100.0	8.78	94.61	8,021.3	-83.2	1,032.2	31.5	0.00	0.00	0.00
8,200.0	8.78	94.61	8,120.2	-84.4	1,047.4	31.9	0.00	0.00	0.00
8,300.0	8.78	94.61	8,219.0	-85.7	1,062.6	32.4	0.00	0.00	0.00
8,400.0	8.78	94.61	8,317.8	-86.9	1,077.9	32.9	0.00	0.00	0.00
8,500.0	8.78	94.61	8,416.6	-88.1	1,093.1	33.3	0.00	0.00	0.00
8,600.0	8.78	94.61	8,515.5	-89.4	1,108.3	33.8	0.00	0.00	0.00
8,700.0	8.78	94.61	8,614.3	-90.6	1,123.5	34.3	0.00	0.00	0.00
8,800.0	8.78	94.61	8,713.1	-91.8	1,138.7	34.7	0.00	0.00	0.00
8,900.0	8.78	94.61	8,811.9	-93.0	1,154.0	35.2	0.00	0.00	0.00
9,000.0	8.78	94.61	8,910.8	-94.3	1,169.2	35.6	0.00	0.00	0.00
9,100.0	8.78	94.61	9,009.6	-95.5	1,184.4	36.1	0.00	0.00	0.00
9,200.0	8.78	94.61	9,108.4	-96.7	1,199.6	36.6	0.00	0.00	0.00
9,300.0	8.78	94.61	9,207.2	-97.9	1,214.8	37.0	0.00	0.00	0.00
9,400.0	8.78	94.61	9,306.1	-99.2	1,230.1	37.5	0.00	0.00	0.00
9,500.0	8.78	94.61	9,404.9	-100.4	1,245.3	38.0	0.00	0.00	0.00
9,600.0	8.78	94.61	9,503.7	-101.6	1,260.5	38.4	0.00	0.00	0.00
9,700.0	8.78	94.61	9,602.6	-102.9	1,275.7	38.9	0.00	0.00	0.00
9,800.0	8.78	94.61	9,701.4	-104.1	1,291.0	39.4	0.00	0.00	0.00
9,907.4	8.78	94.61	9,807.5	-105.4	1,307.3	39.9	0.00	0.00	0.00
10,000.0	6.93	94.61	9,899.3	-106.4	1,319.9	40.2	2.00	-2.00	0.00
10,100.0	4.93	94.61	9,998.7	-107.2	1,330.2	40.6	2.00	-2.00	0.00
10,200.0	2.93	94.61	10,098.5	-107.8	1,337.1	40.8	2.00	-2.00	0.00
10,300.0	0.93	94.61	10,198.4	-108.1	1,340.4	40.9	2.00	-2.00	0.00
10,346.6	0.00	0.00	10,245.0	-108.1	1,340.8	40.9	2.00	-2.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site FNR Federal Unit #34H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3178.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3178.0usft (Original Well Elev)
Site:	FNR Federal Unit #34H	North Reference:	Grid
Well:	Sec 17, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 2310' FWL (Sec 5)		
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)
KOP: 1623' FNL & 2310' FWL (Sec 17)									
10,350.0	0.34	359.86	10,248.4	-108.1	1,340.8	40.9	10.00	10.00	0.00
10,400.0	5.34	359.86	10,298.3	-105.6	1,340.8	43.3	10.00	10.00	0.00
10,450.0	10.34	359.86	10,347.8	-98.8	1,340.8	50.1	10.00	10.00	0.00
10,500.0	15.34	359.86	10,396.6	-87.7	1,340.7	61.2	10.00	10.00	0.00
10,550.0	20.34	359.86	10,444.2	-72.4	1,340.7	76.4	10.00	10.00	0.00
10,600.0	25.34	359.86	10,490.2	-53.0	1,340.7	95.6	10.00	10.00	0.00
10,650.0	30.34	359.86	10,534.4	-29.6	1,340.6	118.8	10.00	10.00	0.00
10,700.0	35.34	359.86	10,576.4	-2.5	1,340.5	145.8	10.00	10.00	0.00
10,750.0	40.34	359.86	10,615.9	28.1	1,340.5	176.2	10.00	10.00	0.00
10,800.0	45.34	359.86	10,652.6	62.1	1,340.4	210.0	10.00	10.00	0.00
10,850.0	50.34	359.86	10,686.1	99.2	1,340.3	246.8	10.00	10.00	0.00
10,900.0	55.34	359.86	10,716.3	139.0	1,340.2	286.4	10.00	10.00	0.00
10,950.0	60.34	359.86	10,742.9	181.3	1,340.1	328.4	10.00	10.00	0.00
11,000.0	65.34	359.86	10,765.7	225.8	1,340.0	372.6	10.00	10.00	0.00
11,050.0	70.34	359.86	10,784.6	272.1	1,339.9	418.6	10.00	10.00	0.00
11,100.0	75.34	359.86	10,799.3	319.8	1,339.7	466.1	10.00	10.00	0.00
11,150.0	80.33	359.86	10,809.9	368.7	1,339.6	514.6	10.00	10.00	0.00
11,200.0	85.33	359.86	10,816.1	418.3	1,339.5	563.9	10.00	10.00	0.00
11,246.7	90.00	359.86	10,818.0	464.9	1,339.4	610.2	10.00	10.00	0.00
FTP/LP: 1050' FNL & 2310' FWL (Sec 17)									
11,300.0	90.00	359.86	10,818.0	518.2	1,339.3	663.2	0.00	0.00	0.00
11,400.0	90.00	359.86	10,818.0	618.2	1,339.0	762.6	0.00	0.00	0.00
11,500.0	90.00	359.86	10,818.0	718.2	1,338.8	861.9	0.00	0.00	0.00
11,600.0	90.00	359.86	10,818.0	818.2	1,338.5	961.3	0.00	0.00	0.00
11,700.0	90.00	359.86	10,818.0	918.2	1,338.3	1,060.6	0.00	0.00	0.00
11,800.0	90.00	359.86	10,818.0	1,018.2	1,338.0	1,160.0	0.00	0.00	0.00
11,900.0	90.00	359.86	10,818.0	1,118.2	1,337.8	1,259.4	0.00	0.00	0.00
12,000.0	90.00	359.86	10,818.0	1,218.2	1,337.5	1,358.7	0.00	0.00	0.00
12,100.0	90.00	359.86	10,818.0	1,318.2	1,337.3	1,458.1	0.00	0.00	0.00
12,200.0	90.00	359.86	10,818.0	1,418.2	1,337.0	1,557.4	0.00	0.00	0.00
12,296.7	90.00	359.86	10,818.0	1,514.9	1,336.8	1,653.5	0.00	0.00	0.00
PPP2: 0' FSL & 2310' FWL (Sec 8)									
12,300.0	90.00	359.86	10,818.0	1,518.2	1,336.8	1,656.8	0.00	0.00	0.00
12,400.0	90.00	359.86	10,818.0	1,618.2	1,336.5	1,756.1	0.00	0.00	0.00
12,500.0	90.00	359.86	10,818.0	1,718.2	1,336.3	1,855.5	0.00	0.00	0.00
12,600.0	90.00	359.86	10,818.0	1,818.2	1,336.1	1,954.9	0.00	0.00	0.00
12,700.0	90.00	359.86	10,818.0	1,918.2	1,335.8	2,054.2	0.00	0.00	0.00
12,800.0	90.00	359.86	10,818.0	2,018.2	1,335.6	2,153.6	0.00	0.00	0.00
12,900.0	90.00	359.86	10,818.0	2,118.2	1,335.3	2,252.9	0.00	0.00	0.00
13,000.0	90.00	359.86	10,818.0	2,218.2	1,335.1	2,352.3	0.00	0.00	0.00
13,100.0	90.00	359.86	10,818.0	2,318.2	1,334.8	2,451.7	0.00	0.00	0.00
13,200.0	90.00	359.86	10,818.0	2,418.2	1,334.6	2,551.0	0.00	0.00	0.00
13,300.0	90.00	359.86	10,818.0	2,518.2	1,334.3	2,650.4	0.00	0.00	0.00
13,400.0	90.00	359.86	10,818.0	2,618.2	1,334.1	2,749.7	0.00	0.00	0.00
13,500.0	90.00	359.86	10,818.0	2,718.2	1,333.8	2,849.1	0.00	0.00	0.00
13,600.0	90.00	359.86	10,818.0	2,818.2	1,333.6	2,948.5	0.00	0.00	0.00
13,700.0	90.00	359.86	10,818.0	2,918.2	1,333.3	3,047.8	0.00	0.00	0.00
13,800.0	90.00	359.86	10,818.0	3,018.2	1,333.1	3,147.2	0.00	0.00	0.00
13,900.0	90.00	359.86	10,818.0	3,118.2	1,332.9	3,246.5	0.00	0.00	0.00
14,000.0	90.00	359.86	10,818.0	3,218.2	1,332.6	3,345.9	0.00	0.00	0.00
14,100.0	90.00	359.86	10,818.0	3,318.2	1,332.4	3,445.2	0.00	0.00	0.00
14,200.0	90.00	359.86	10,818.0	3,418.2	1,332.1	3,544.6	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site FNR Federal Unit #34H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3178.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3178.0usft (Original Well Elev)
Site:	FNR Federal Unit #34H	North Reference:	Grid
Well:	Sec 17, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 2310' FWL (Sec 5)		
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)	
14,300.0	90.00	359.86	10,818.0	3,518.2	1,331.9	3,644.0	0.00	0.00	0.00	
14,400.0	90.00	359.86	10,818.0	3,618.2	1,331.6	3,743.3	0.00	0.00	0.00	
14,500.0	90.00	359.86	10,818.0	3,718.2	1,331.4	3,842.7	0.00	0.00	0.00	
14,600.0	90.00	359.86	10,818.0	3,818.2	1,331.1	3,942.0	0.00	0.00	0.00	
14,700.0	90.00	359.86	10,818.0	3,918.2	1,330.9	4,041.4	0.00	0.00	0.00	
14,800.0	90.00	359.86	10,818.0	4,018.2	1,330.6	4,140.8	0.00	0.00	0.00	
14,900.0	90.00	359.86	10,818.0	4,118.2	1,330.4	4,240.1	0.00	0.00	0.00	
15,000.0	90.00	359.86	10,818.0	4,218.2	1,330.1	4,339.5	0.00	0.00	0.00	
15,100.0	90.00	359.86	10,818.0	4,318.2	1,329.9	4,438.8	0.00	0.00	0.00	
15,200.0	90.00	359.86	10,818.0	4,418.2	1,329.6	4,538.2	0.00	0.00	0.00	
15,300.0	90.00	359.86	10,818.0	4,518.2	1,329.4	4,637.6	0.00	0.00	0.00	
15,400.0	90.00	359.86	10,818.0	4,618.2	1,329.2	4,736.9	0.00	0.00	0.00	
15,500.0	90.00	359.86	10,818.0	4,718.2	1,328.9	4,836.3	0.00	0.00	0.00	
15,600.0	90.00	359.86	10,818.0	4,818.2	1,328.7	4,935.6	0.00	0.00	0.00	
15,700.0	90.00	359.86	10,818.0	4,918.2	1,328.4	5,035.0	0.00	0.00	0.00	
15,800.0	90.00	359.86	10,818.0	5,018.2	1,328.2	5,134.3	0.00	0.00	0.00	
15,900.0	90.00	359.86	10,818.0	5,118.2	1,327.9	5,233.7	0.00	0.00	0.00	
16,000.0	90.00	359.86	10,818.0	5,218.2	1,327.7	5,333.1	0.00	0.00	0.00	
16,100.0	90.00	359.86	10,818.0	5,318.2	1,327.4	5,432.4	0.00	0.00	0.00	
16,200.0	90.00	359.86	10,818.0	5,418.2	1,327.2	5,531.8	0.00	0.00	0.00	
16,300.0	90.00	359.86	10,818.0	5,518.2	1,326.9	5,631.1	0.00	0.00	0.00	
16,400.0	90.00	359.86	10,818.0	5,618.2	1,326.7	5,730.5	0.00	0.00	0.00	
16,500.0	90.00	359.86	10,818.0	5,718.2	1,326.4	5,829.9	0.00	0.00	0.00	
16,600.0	90.00	359.86	10,818.0	5,818.2	1,326.2	5,929.2	0.00	0.00	0.00	
16,700.0	90.00	359.86	10,818.0	5,918.2	1,326.0	6,028.6	0.00	0.00	0.00	
16,800.0	90.00	359.86	10,818.0	6,018.2	1,325.7	6,127.9	0.00	0.00	0.00	
16,900.0	90.00	359.86	10,818.0	6,118.2	1,325.5	6,227.3	0.00	0.00	0.00	
17,000.0	90.00	359.86	10,818.0	6,218.2	1,325.2	6,326.6	0.00	0.00	0.00	
17,100.0	90.00	359.86	10,818.0	6,318.2	1,325.0	6,426.0	0.00	0.00	0.00	
17,200.0	90.00	359.86	10,818.0	6,418.2	1,324.7	6,525.4	0.00	0.00	0.00	
17,300.0	90.00	359.86	10,818.0	6,518.2	1,324.5	6,624.7	0.00	0.00	0.00	
17,400.0	90.00	359.86	10,818.0	6,618.2	1,324.2	6,724.1	0.00	0.00	0.00	
17,500.0	90.00	359.86	10,818.0	6,718.2	1,324.0	6,823.4	0.00	0.00	0.00	
17,589.4	90.00	359.86	10,818.0	6,807.7	1,323.8	6,912.3	0.00	0.00	0.00	
PPP3: 0' FSL & 2310' FWL (Sec 5)										
17,600.0	90.00	359.86	10,818.0	6,818.2	1,323.7	6,922.8	0.00	0.00	0.00	
17,700.0	90.00	359.86	10,818.0	6,918.2	1,323.5	7,022.2	0.00	0.00	0.00	
17,800.0	90.00	359.86	10,818.0	7,018.2	1,323.2	7,121.5	0.00	0.00	0.00	
17,900.0	90.00	359.86	10,818.0	7,118.2	1,323.0	7,220.9	0.00	0.00	0.00	
18,000.0	90.00	359.86	10,818.0	7,218.2	1,322.7	7,320.2	0.00	0.00	0.00	
18,100.0	90.00	359.86	10,818.0	7,318.2	1,322.5	7,419.6	0.00	0.00	0.00	
18,200.0	90.00	359.86	10,818.0	7,418.2	1,322.3	7,519.0	0.00	0.00	0.00	
18,300.0	90.00	359.86	10,818.0	7,518.2	1,322.0	7,618.3	0.00	0.00	0.00	
18,400.0	90.00	359.86	10,818.0	7,618.2	1,321.8	7,717.7	0.00	0.00	0.00	
18,500.0	90.00	359.86	10,818.0	7,718.2	1,321.5	7,817.0	0.00	0.00	0.00	
18,600.0	90.00	359.86	10,818.0	7,818.2	1,321.3	7,916.4	0.00	0.00	0.00	
18,700.0	90.00	359.86	10,818.0	7,918.2	1,321.0	8,015.7	0.00	0.00	0.00	
18,800.0	90.00	359.86	10,818.0	8,018.2	1,320.8	8,115.1	0.00	0.00	0.00	
18,900.0	90.00	359.86	10,818.0	8,118.2	1,320.5	8,214.5	0.00	0.00	0.00	
19,000.0	90.00	359.86	10,818.0	8,218.2	1,320.3	8,313.8	0.00	0.00	0.00	
19,100.0	90.00	359.86	10,818.0	8,318.2	1,320.0	8,413.2	0.00	0.00	0.00	
19,200.0	90.00	359.86	10,818.0	8,418.2	1,319.8	8,512.5	0.00	0.00	0.00	
19,300.0	90.00	359.86	10,818.0	8,518.2	1,319.5	8,611.9	0.00	0.00	0.00	
19,400.0	90.00	359.86	10,818.0	8,618.2	1,319.3	8,711.3	0.00	0.00	0.00	

Planning Report

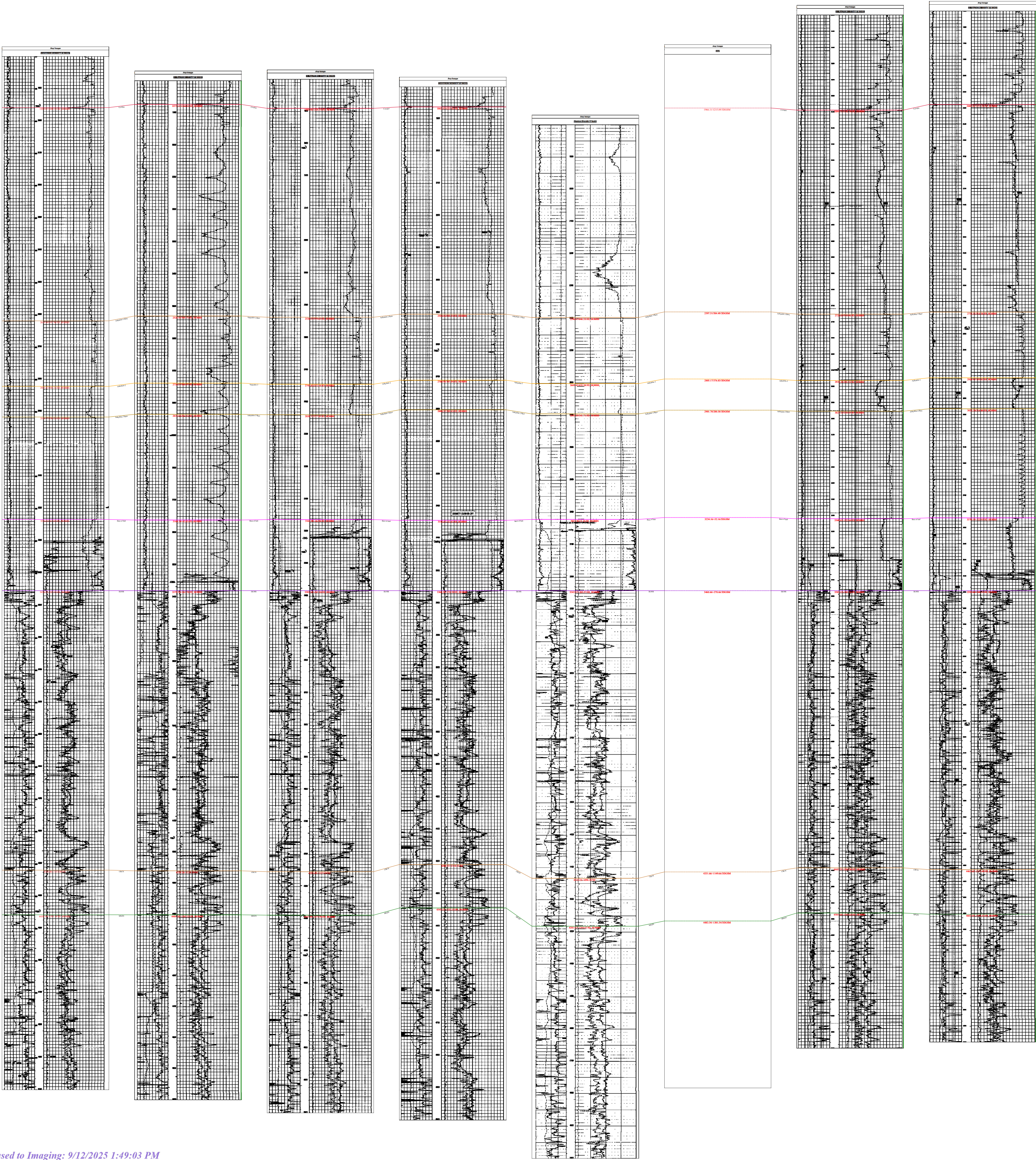
Database:	Hobbs	Local Co-ordinate Reference:	Site FNR Federal Unit #34H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3178.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3178.0usft (Original Well Elev)
Site:	FNR Federal Unit #34H	North Reference:	Grid
Well:	Sec 17, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 2310' FWL (Sec 5)		
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)	
19,500.0	90.00	359.86	10,818.0	8,718.2	1,319.1	8,810.6	0.00	0.00	0.00	
19,600.0	90.00	359.86	10,818.0	8,818.2	1,318.8	8,910.0	0.00	0.00	0.00	
19,700.0	90.00	359.86	10,818.0	8,918.2	1,318.6	9,009.3	0.00	0.00	0.00	
19,800.0	90.00	359.86	10,818.0	9,018.2	1,318.3	9,108.7	0.00	0.00	0.00	
19,900.0	90.00	359.86	10,818.0	9,118.2	1,318.1	9,208.1	0.00	0.00	0.00	
20,000.0	90.00	359.86	10,818.0	9,218.2	1,317.8	9,307.4	0.00	0.00	0.00	
20,100.0	90.00	359.86	10,818.0	9,318.2	1,317.6	9,406.8	0.00	0.00	0.00	
20,200.0	90.00	359.86	10,818.0	9,418.2	1,317.3	9,506.1	0.00	0.00	0.00	
20,300.0	90.00	359.86	10,818.0	9,518.2	1,317.1	9,605.5	0.00	0.00	0.00	
20,400.0	90.00	359.86	10,818.0	9,618.2	1,316.8	9,704.8	0.00	0.00	0.00	
20,500.0	90.00	359.86	10,818.0	9,718.2	1,316.6	9,804.2	0.00	0.00	0.00	
20,600.0	90.00	359.86	10,818.0	9,818.2	1,316.3	9,903.6	0.00	0.00	0.00	
20,700.0	90.00	359.86	10,818.0	9,918.2	1,316.1	10,002.9	0.00	0.00	0.00	
20,800.0	90.00	359.86	10,818.0	10,018.2	1,315.8	10,102.3	0.00	0.00	0.00	
20,900.0	90.00	359.86	10,818.0	10,118.2	1,315.6	10,201.6	0.00	0.00	0.00	
21,000.0	90.00	359.86	10,818.0	10,218.2	1,315.4	10,301.0	0.00	0.00	0.00	
21,100.0	90.00	359.86	10,818.0	10,318.2	1,315.1	10,400.4	0.00	0.00	0.00	
21,200.0	90.00	359.86	10,818.0	10,418.2	1,314.9	10,499.7	0.00	0.00	0.00	
21,300.0	90.00	359.86	10,818.0	10,518.2	1,314.6	10,599.1	0.00	0.00	0.00	
21,400.0	90.00	359.86	10,818.0	10,618.2	1,314.4	10,698.4	0.00	0.00	0.00	
21,500.0	90.00	359.86	10,818.0	10,718.2	1,314.1	10,797.8	0.00	0.00	0.00	
21,600.0	90.00	359.86	10,818.0	10,818.2	1,313.9	10,897.2	0.00	0.00	0.00	
21,700.0	90.00	359.86	10,818.0	10,918.2	1,313.6	10,996.5	0.00	0.00	0.00	
21,800.0	90.00	359.86	10,818.0	11,018.2	1,313.4	11,095.9	0.00	0.00	0.00	
21,900.0	90.00	359.86	10,818.0	11,118.2	1,313.1	11,195.2	0.00	0.00	0.00	
22,000.0	90.00	359.86	10,818.0	11,218.2	1,312.9	11,294.6	0.00	0.00	0.00	
22,100.0	90.00	359.86	10,818.0	11,318.2	1,312.6	11,393.9	0.00	0.00	0.00	
22,200.0	90.00	359.86	10,818.0	11,418.2	1,312.4	11,493.3	0.00	0.00	0.00	
22,300.0	90.00	359.86	10,818.0	11,518.2	1,312.2	11,592.7	0.00	0.00	0.00	
22,400.0	90.00	359.86	10,818.0	11,618.2	1,311.9	11,692.0	0.00	0.00	0.00	
22,500.0	90.00	359.86	10,818.0	11,718.2	1,311.7	11,791.4	0.00	0.00	0.00	
22,565.5	90.00	359.86	10,818.0	11,783.7	1,311.5	11,856.5	0.00	0.00	0.00	
BHL: 330' FNL & 2310' FWL (Sec 5)										

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site FNR Federal Unit #34H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3178.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3178.0usft (Original Well Elev)
Site:	FNR Federal Unit #34H	North Reference:	Grid
Well:	Sec 17, T23S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FNL & 2310' FWL (Sec 5)		
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: 1500' FNL & 970' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	476,110.70	672,378.50	32.3081887	-103.9091809
KOP: 1623' FNL & 2310' - plan hits target center - Point	0.00	0.00	10,245.0	-108.1	1,340.8	476,002.60	673,719.30	32.3078769	-103.9048425
PPP2: 0' FSL & 2310' FV - plan hits target center - Point	0.00	0.00	10,818.0	1,514.9	1,336.8	477,625.61	673,715.30	32.3123382	-103.9048345
BHL: 330' FNL & 2310' F - plan hits target center - Point	0.00	0.00	10,818.0	11,783.7	1,311.5	487,894.40	673,690.00	32.3405652	-103.9047834
PPP3: 0' FSL & 2310' FV - plan hits target center - Point	0.00	0.00	10,818.0	6,807.7	1,323.8	482,918.36	673,702.26	32.3268870	-103.9048082
FTP/LP: 1050' FNL & 23 - plan hits target center - Point	0.00	0.00	10,818.0	464.9	1,339.4	476,575.61	673,717.88	32.3094520	-103.9048397





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		² Pool Code 98220		³ Pool Name PURPLE SAGE; WOLFCAMP	
⁴ Property Code		⁵ Property Name FNR FEDERAL UNIT			⁶ Well Number 34H
⁷ OGRID NO.		⁸ Operator Name MEWBOURNE OIL COMPANY			⁹ Elevation 3150'

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
E	17	23S	30E		1500	NORTH	970	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
3	5	23S	30E		330	NORTH	2310	WEST	EDDY
¹² Dedicated Acres 720		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.

<p>16</p> <p><u>GEODETIC DATA</u> NAD 83 GRID - NM EAST <u>SURFACE LOCATION</u> N: 476110.7 - E: 672378.5 LAT: 32.3081888° N LONG: 103.9091811° W <u>BOTTOM HOLE</u> N: 487894.4 - E: 673690.0 LAT: 32.3405651° N LONG: 103.9047835° W <u>CORNER DATA</u> NAD 83 GRID - NM EAST</p> <table border="0"> <tr> <td>A: FOUND BRASS CAP "1942" N: 472297.5 - E: 671429.1</td> <td>J: FOUND BRASS CAP "1942" N: 485577.8 - E: 676737.7</td> </tr> <tr> <td>B: FOUND BRASS CAP "1942" N: 474948.9 - E: 671415.2</td> <td>K: FOUND BRASS CAP "1942" N: 482936.8 - E: 676743.4</td> </tr> <tr> <td>C: FOUND BRASS CAP "1942" N: 477599.4 - E: 671400.3</td> <td>L: FOUND BRASS CAP "1942" N: 480298.2 - E: 676753.3</td> </tr> <tr> <td>D: FOUND BRASS CAP "1942" N: 480252.1 - E: 671389.3</td> <td>M: FOUND BRASS CAP "1942" N: 477660.1 - E: 676763.6</td> </tr> <tr> <td>E: FOUND BRASS CAP "1942" N: 482905.7 - E: 671378.4</td> <td>N: FOUND BRASS CAP "1942" N: 475024.2 - E: 676811.0</td> </tr> <tr> <td>F: FOUND BRASS CAP "1942" N: 485556.6 - E: 671379.5</td> <td>O: FOUND BRASS CAP "1942" N: 472367.7 - E: 676781.9</td> </tr> <tr> <td>G: FOUND BRASS CAP "1916" N: 488221.0 - E: 671380.6</td> <td>P: FOUND BRASS CAP "1942" N: 472332.3 - E: 674105.8</td> </tr> <tr> <td>H: FOUND BRASS CAP "1916" N: 488224.8 - E: 674055.9</td> <td>Q: FOUND BRASS CAP "1942" N: 477629.8 - E: 674079.9</td> </tr> <tr> <td>I: FOUND BRASS CAP "1916" N: 488229.8 - E: 676731.9</td> <td>R: FOUND BRASS CAP "1942" N: 482920.4 - E: 674061.5</td> </tr> </table>	A: FOUND BRASS CAP "1942" N: 472297.5 - E: 671429.1	J: FOUND BRASS CAP "1942" N: 485577.8 - E: 676737.7	B: FOUND BRASS CAP "1942" N: 474948.9 - E: 671415.2	K: FOUND BRASS CAP "1942" N: 482936.8 - E: 676743.4	C: FOUND BRASS CAP "1942" N: 477599.4 - E: 671400.3	L: FOUND BRASS CAP "1942" N: 480298.2 - E: 676753.3	D: FOUND BRASS CAP "1942" N: 480252.1 - E: 671389.3	M: FOUND BRASS CAP "1942" N: 477660.1 - E: 676763.6	E: FOUND BRASS CAP "1942" N: 482905.7 - E: 671378.4	N: FOUND BRASS CAP "1942" N: 475024.2 - E: 676811.0	F: FOUND BRASS CAP "1942" N: 485556.6 - E: 671379.5	O: FOUND BRASS CAP "1942" N: 472367.7 - E: 676781.9	G: FOUND BRASS CAP "1916" N: 488221.0 - E: 671380.6	P: FOUND BRASS CAP "1942" N: 472332.3 - E: 674105.8	H: FOUND BRASS CAP "1916" N: 488224.8 - E: 674055.9	Q: FOUND BRASS CAP "1942" N: 477629.8 - E: 674079.9	I: FOUND BRASS CAP "1916" N: 488229.8 - E: 676731.9	R: FOUND BRASS CAP "1942" N: 482920.4 - E: 674061.5		<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>Carter Crook</i> 5/20/2024 Signature Date Carter Crook Printed Name ccrook@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>08/01/2022 Date of Survey Signature and Seal of Professional Surveyor 19680 Certificate Number REV: BH MOVE 03/25/24 Job No.: LS22080918D</p>
A: FOUND BRASS CAP "1942" N: 472297.5 - E: 671429.1	J: FOUND BRASS CAP "1942" N: 485577.8 - E: 676737.7																			
B: FOUND BRASS CAP "1942" N: 474948.9 - E: 671415.2	K: FOUND BRASS CAP "1942" N: 482936.8 - E: 676743.4																			
C: FOUND BRASS CAP "1942" N: 477599.4 - E: 671400.3	L: FOUND BRASS CAP "1942" N: 480298.2 - E: 676753.3																			
D: FOUND BRASS CAP "1942" N: 480252.1 - E: 671389.3	M: FOUND BRASS CAP "1942" N: 477660.1 - E: 676763.6																			
E: FOUND BRASS CAP "1942" N: 482905.7 - E: 671378.4	N: FOUND BRASS CAP "1942" N: 475024.2 - E: 676811.0																			
F: FOUND BRASS CAP "1942" N: 485556.6 - E: 671379.5	O: FOUND BRASS CAP "1942" N: 472367.7 - E: 676781.9																			
G: FOUND BRASS CAP "1916" N: 488221.0 - E: 671380.6	P: FOUND BRASS CAP "1942" N: 472332.3 - E: 674105.8																			
H: FOUND BRASS CAP "1916" N: 488224.8 - E: 674055.9	Q: FOUND BRASS CAP "1942" N: 477629.8 - E: 674079.9																			
I: FOUND BRASS CAP "1916" N: 488229.8 - E: 676731.9	R: FOUND BRASS CAP "1942" N: 482920.4 - E: 674061.5																			

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

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

CONDITIONS

Action 364303

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 364303
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.	9/12/2025
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	9/12/2025