

|                                          |                                                     |                                        |
|------------------------------------------|-----------------------------------------------------|----------------------------------------|
| <b>Well Name:</b> FORTY NINER RIDGE UNIT | <b>Well Location:</b> T23S / R30E / SEC 16 / SWNW / | <b>County or Parish/State:</b> /       |
| <b>Well Number:</b> 123H                 | <b>Type of Well:</b> OIL WELL                       | <b>Allottee or Tribe Name:</b>         |
| <b>Lease Number:</b> NMNM104965          | <b>Unit or CA Name:</b>                             | <b>Unit or CA Number:</b> NMNM070951X  |
| <b>US Well Number:</b> 3001549425        | <b>Well Status:</b> Drilling Well                   | <b>Operator:</b> MEWBOURNE OIL COMPANY |

### Notice of Intent

**Sundry ID:** 2676520

**Type of Submission:** Notice of Intent

**Type of Action:** Other

**Date Sundry Submitted:** 06/13/2022

**Time Sundry Submitted:** 05:15

**Date proposed operation will begin:** 09/01/2022

**Procedure Description:** SHL Change: Initial-2465' FNL & 740' FWL (Sec 16)/ Updated-2465' FNL & 800' FWL (Sec 16) BHL Change: Initial-100' FSL & 845' FWL (Sec 21) / Update-330' FSL & 1565' FWL (Sec 21) Zone Change: Initial-Bone Springs 3rd / Updated-Wolfcamp Csg Design Change: Please see attached Cmt Change: Please see attached

### Surface Disturbance

**Is any additional surface disturbance proposed?:** No

### NOI Attachments

#### Procedure Description

Forty\_Niner\_Ridge\_Unit\_123H\_Drilling\_Plan\_20220613171534.pdf  
Forty\_Niner\_Ridge\_Unit\_123H\_\_Application\_Section\_3\_20220613171428.pdf  
Forty\_Niner\_Ridge\_Unit\_123H\_MOC\_Dir\_Plot\_20220613170749.pdf  
Forty\_Niner\_Ridge\_Unit\_123H\_Csg\_Assumptions\_20220613170749.pdf  
Forty\_Niner\_Ridge\_Unit\_123H\_Add\_Info\_20220613170749.pdf  
FORTY\_NINER\_RIDGE\_UNIT\_\_123H\_20220613170749.pdf  
Forty\_Niner\_Ridge\_Unit\_123H\_MOC\_Dir\_Plan\_20220613170749.pdf

**Well Name:** FORTY-NINER RIDGE  
UNIT**Well Location:** T23S / R30E / SEC 16 /  
SWNW /**County or Parish/State:** /**Well Number:** 123H**Type of Well:** OIL WELL**Allottee or Tribe Name:****Lease Number:** NMNM104965**Unit or CA Name:****Unit or CA Number:**  
NMNM070951X**US Well Number:** 3001549425**Well Status:** Drilling Well**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:** BRADLEY BISHOP**Signed on:** JUN 13, 2022 05:07 PM**Name:** MEWBOURNE OIL COMPANY**Title:** Regulatory**Street Address:** PO Box 5270**City:** Hobbs**State:** NM**Phone:** (575) 393-5905**Email address:** bbishop@mewbourne.com**Field****Representative Name:** Christian Ward**Street Address:** Business Park Blvd**City:** Hobbs**State:** NM**Zip:** 88240-9439**Phone:** (580)754-0042**Email address:** cward@mewbourne.com**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:** 06/22/2022**Signature:** Chris Walls

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

|                            |  |                                                             |  |                                                       |                                         |
|----------------------------|--|-------------------------------------------------------------|--|-------------------------------------------------------|-----------------------------------------|
| <sup>1</sup> API Number    |  | <sup>2</sup> Pool Code<br><b>98220</b>                      |  | <sup>3</sup> Pool Name<br><b>Purple Sage;Wolfcamp</b> |                                         |
| <sup>4</sup> Property Code |  | <sup>5</sup> Property Name<br><b>FORTY NINER RIDGE UNIT</b> |  |                                                       | <sup>6</sup> Well Number<br><b>123H</b> |
| <sup>7</sup> OGRID NO.     |  | <sup>8</sup> Operator Name<br><b>MEWBOURNE OIL COMPANY</b>  |  |                                                       | <sup>9</sup> Elevation<br><b>3172'</b>  |

<sup>10</sup> Surface Location

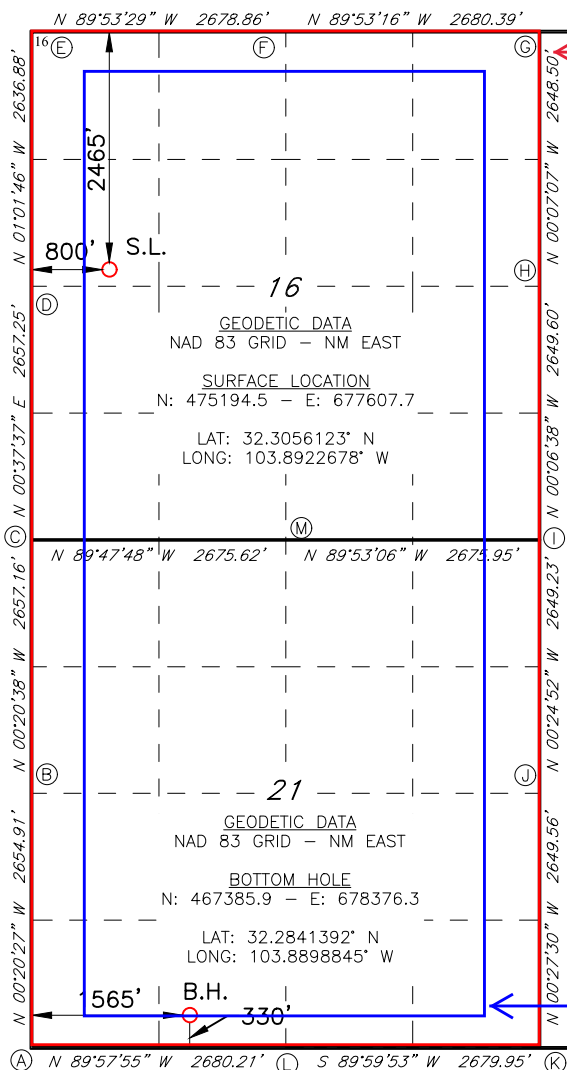
| UL or lot no. | Section   | Township   | Range      | Lot Idn | Feet from the | North/South line | Feet From the | East/West line | County      |
|---------------|-----------|------------|------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>E</b>      | <b>16</b> | <b>23S</b> | <b>30E</b> |         | <b>2465</b>   | <b>NORTH</b>     | <b>800</b>    | <b>WEST</b>    | <b>EDDY</b> |

<sup>11</sup> 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      |
|---------------|-----------|------------|------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>N</b>      | <b>21</b> | <b>23S</b> | <b>30E</b> |         | <b>330</b>    | <b>SOUTH</b>     | <b>1565</b>   | <b>WEST</b>    | <b>EDDY</b> |

|                               |                               |                                  |                         |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> 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.



<sup>17</sup> 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.

*CCW* 06/13/2022  
Signature Date  
Christian Ward  
Printed Name

cward@mewbourne.com  
E-mail Address

<sup>18</sup> 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.

12-4-2020

Date of Survey

Signature and Seal of Professional Surveyor

19680

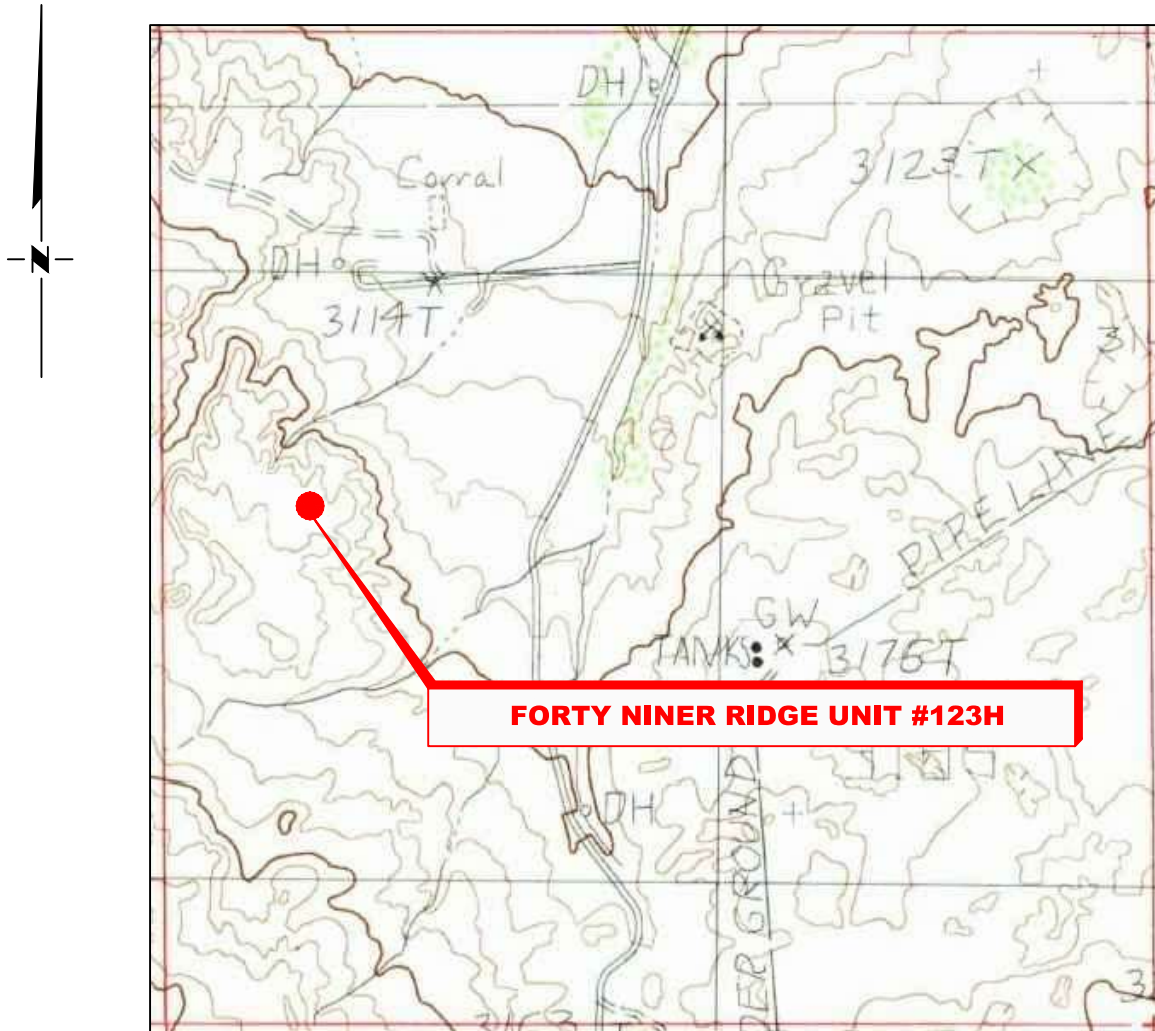
Certificate Number

06/07/22-SHL/BHL MOVED

LS20090503R

# LOCATION VERIFICATION MAP

NOT TO SCALE



*SECTION 16, TWP. 23 SOUTH, RGE. 30 EAST,  
N. M. P. M., EDDY CO., NEW MEXICO*

OPERATOR: Mewbourne Oil CompanyLEASE: Forty Niner Ridge UnitWELL NO.: 123HELEVATION: 3172'LOCATION: 2465' FNL & 800' FWLCONTOUR INTERVAL: 10'

USGS TOPO. SOURCE MAP:

Remuda Basin, NM (P. E. 1985)

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|                       |            |        |
|-----------------------|------------|--------|
|                       |            |        |
| 1                     | WELL MOVED | 6/7/22 |
| NO.                   | REVISION   | DATE   |
| JOB NO.: LS20090503R  |            |        |
| DWG. NO.: 20090503R-2 |            |        |

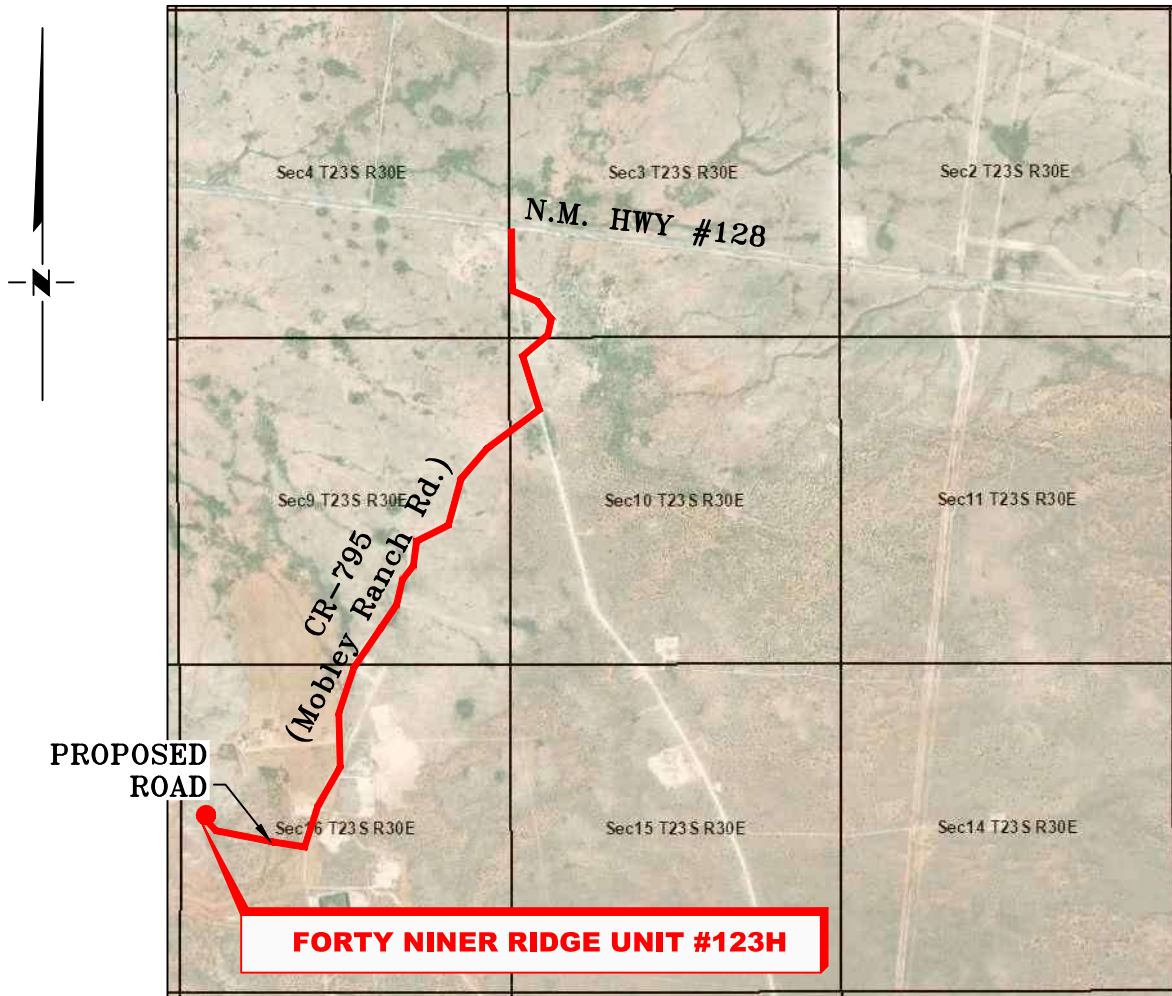


701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

|                    |
|--------------------|
| SCALE: N. T. S.    |
| DATE: 12-04-2020   |
| SURVEYED BY: ML/JC |
| DRAWN BY: LPS      |
| APPROVED BY: RMH   |
| SHEET: 1 OF 1      |

## VICINITY MAP

NOT TO SCALE



SECTION 16, TWP. 23 SOUTH, RGE. 30 EAST,  
N. M. P. M., EDDY CO., NEW MEXICO

OPERATOR: Mewbourne Oil Company  
LEASE: Forty Niner Ridge Unit  
WELL NO.: 123H

LOCATION: 2465' FNL & 800' FWL  
ELEVATION: 3172'

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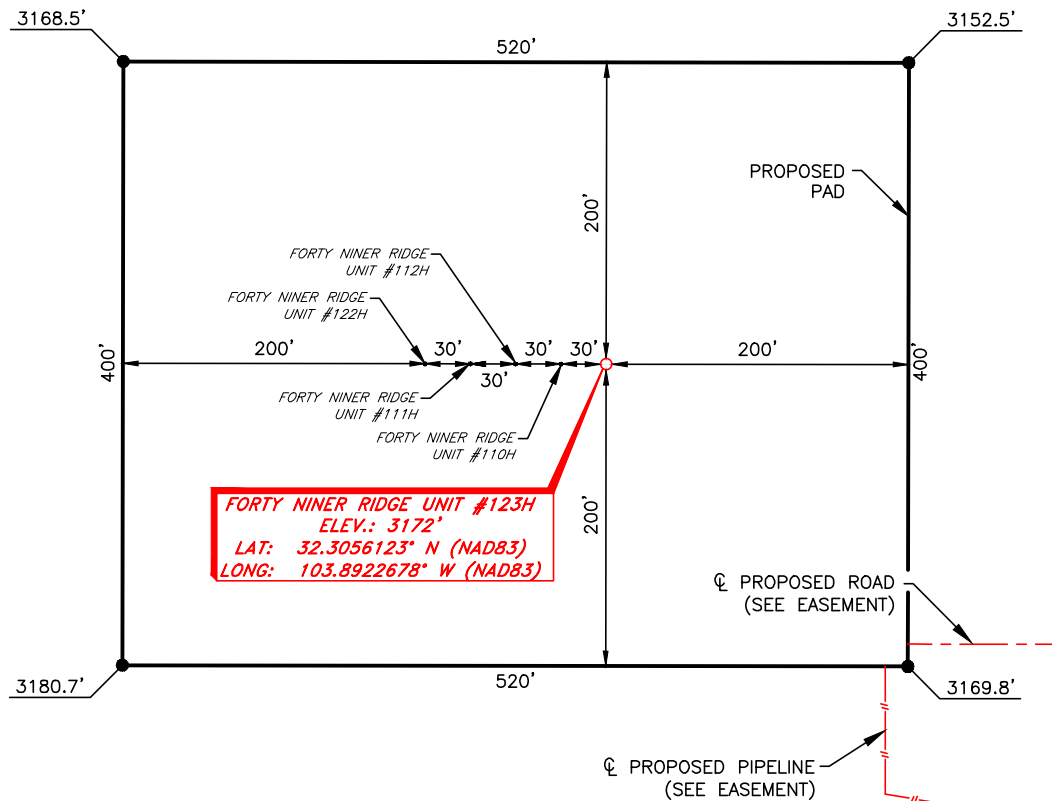
| 1                     | WELL MOVED | 6/7/22 |
|-----------------------|------------|--------|
| NO.                   | REVISION   | DATE   |
| JOB NO.: LS20090503R  |            |        |
| DWG. NO.: 20090503R-3 |            |        |



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

|                    |
|--------------------|
| SCALE: N. T. S.    |
| DATE: 12-04-2020   |
| SURVEYED BY: ML/JC |
| DRAWN BY: LPS      |
| APPROVED BY: RMH   |
| SHEET: 1 OF 1      |

**MEWBOURNE OIL COMPANY  
FORTY NINER RIDGE UNIT #123H  
(2465' FNL & 800' FWL)  
SECTION 16, T23S, R30E  
N. M. P. M., EDDY COUNTY, NEW MEXICO**



DIRECTIONS TO LOCATION

From the intersection of N.M. HWY #128 and CR #795 (Mobley Ranch Rd.);  
Go South on CR #795 approx. 0.6 miles to a "Y";  
Turn right at "Y" and go Southwest approx. 1.6 miles to a proposed road on the right;  
Turn right and go West approx. 0.2 miles to location on the right.

SCALE: 1" = 100'  
0 50 100  
BEARINGS ARE  
NAD 83 GRID - NM EAST  
DISTANCES ARE GROUND

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

*Robert M. Howett*  
Robert M. Howett NM PS 19680



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|           |             |        |
|-----------|-------------|--------|
| 1         | WELL MOVED  | 6/7/22 |
| NO.       | REVISION    | DATE   |
| JOB NO.:  | LS20090503R |        |
| DWG. NO.: | 20090503R-4 |        |



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

|                    |
|--------------------|
| SCALE: 1" = 100'   |
| DATE: 12-04-2020   |
| SURVEYED BY: ML/JC |
| DRAWN BY: LPS      |
| APPROVED BY: RMH   |
| SHEET: 1 OF 1      |

Section 3 - Well Location

Survey Type: RECTANGULAR  
Describe Survey Type:  
Datum: NAD83  
Survey Number:  
Vertical Datum: NAVD88  
Reference Datum: Kelly Bushing

| Wellbore     | NS Foot | NS Indicator | EW Foot | EW Indicator | Township | Range | Section | Aliquot/Lot/Tract | Latitude   | Longitude    | County | State | Meridian | Lease Type | Lease Number | Elevation | MD    | TYD   | Will this well produce from this lease? |
|--------------|---------|--------------|---------|--------------|----------|-------|---------|-------------------|------------|--------------|--------|-------|----------|------------|--------------|-----------|-------|-------|-----------------------------------------|
| SHL Leg #1   | 2465    | N            | 800     | W            | 23S      | 30E   | 16      | SWNW              | 32.3056122 | -103.8922677 | Eddy   | NM    | NM       | S          | State        | 3200      | 0     | 0     | Y                                       |
| KOP Leg #1   | 2396    | N            | 1565    | W            | 23S      | 30E   | 16      | SENW              | 32.3057853 | -103.8897931 | Eddy   | NM    | NM       | S          | State        | -7357     | 10585 | 10557 | Y                                       |
| PPP Leg #1-1 | 2325    | S            | 1565    | W            | 23S      | 30E   | 16      | NESW              | 32.3042102 | -103.8897998 | Eddy   | NM    | NM       | S          | State        | -7930     | 11485 | 11130 | Y                                       |
| PPP Leg #1-2 | 1325    | S            | 1565    | W            | 23S      | 30E   | 21      | NESW              | 32.2868763 | -103.889873  | Eddy   | NM    | NM       | F          | NMNM086441   | -7930     | 17791 | 11130 | Y                                       |
| EXIT Leg #1  | 330     | S            | 1565    | W            | 23S      | 30E   | 21      | SESW              | 32.2841393 | -103.8898846 | Eddy   | NM    | NM       | F          | NMNM086441   | -7930     | 18787 | 11130 | Y                                       |
| BHL Leg #1   | 330     | S            | 1565    | W            | 23S      | 30E   | 21      | SESW              | 32.2841393 | -103.8898846 | Eddy   | NM    | NM       | F          | NMNM086441   | -7930     | 18787 | 11130 | Y                                       |

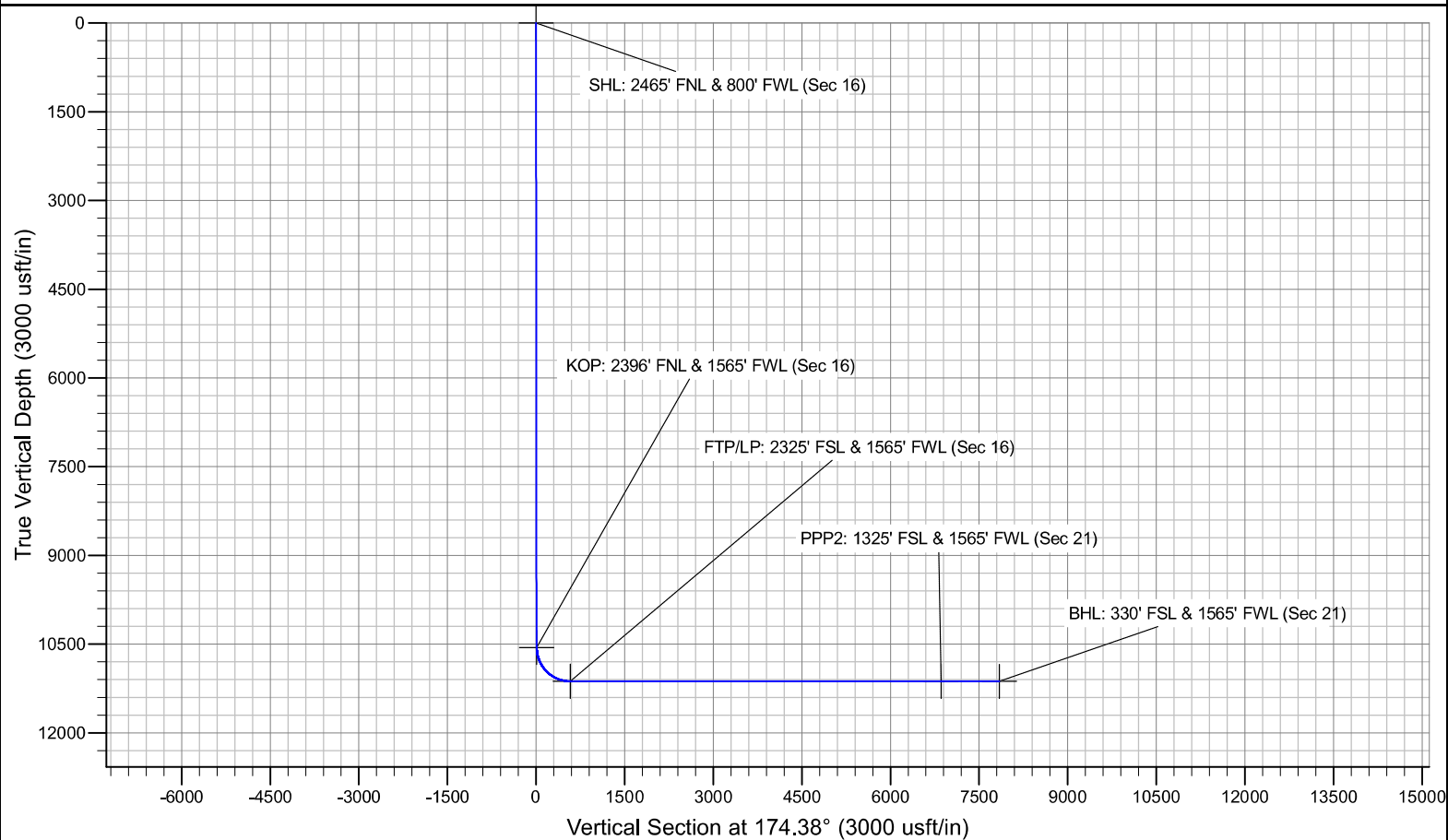
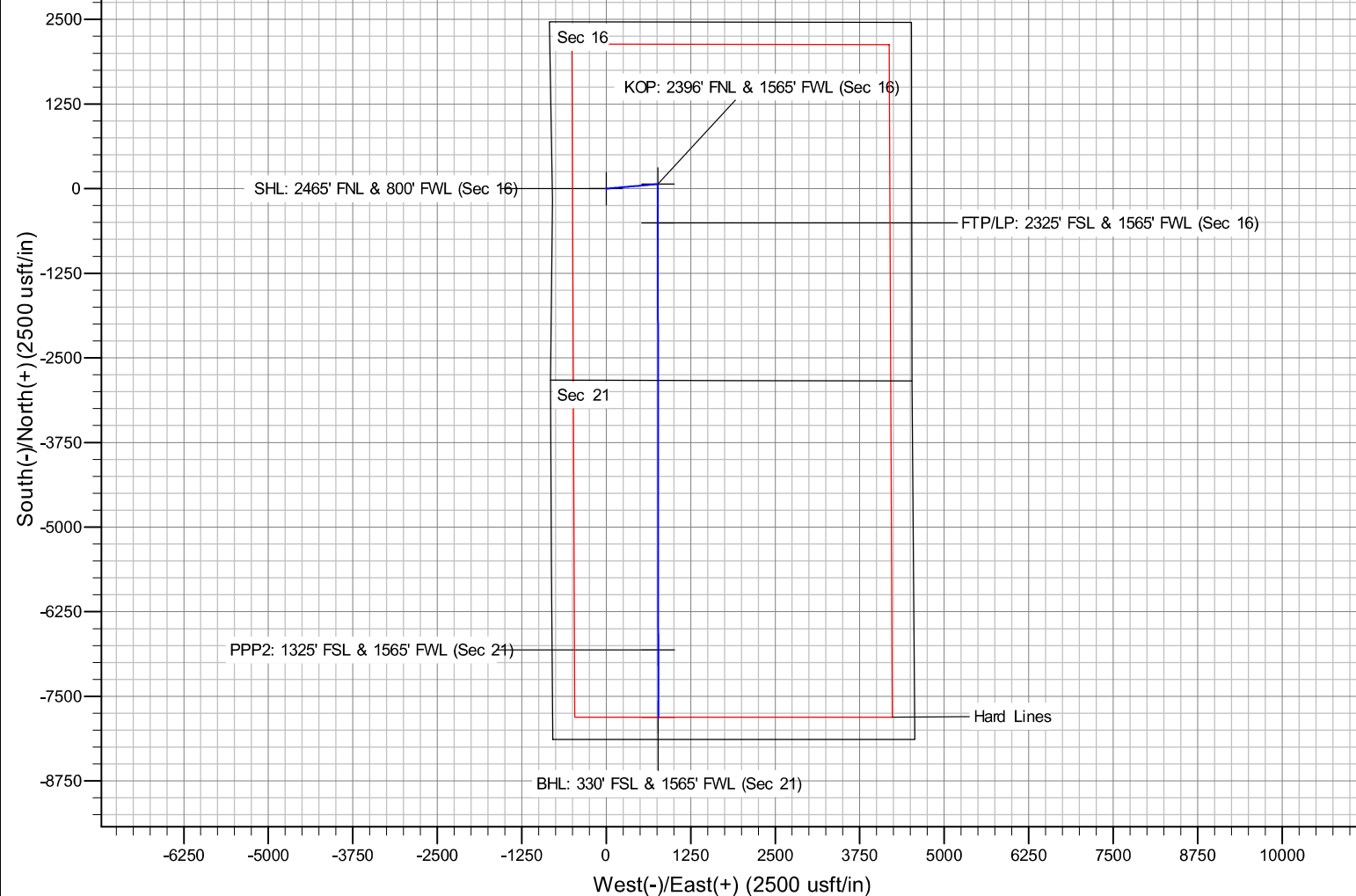
**Mewbourne Oil Company, Forty Niner Ridge Unit #123H****Sec 16, T23S, R30E****SHL: 2465' FNL & 800' FWL, Sec 16****BHL: 330' FSL & 1565' FWL, Sec 21****Casing Program**

| Hole Size                 | Casing Interval |        | Csg. Size | Weight (lbs) | Grade | Conn. | SF Collapse | SF Burst | SF Jt Tension      | SF Body Tension    |
|---------------------------|-----------------|--------|-----------|--------------|-------|-------|-------------|----------|--------------------|--------------------|
|                           | From            | To     |           |              |       |       |             |          |                    |                    |
| 17.5"                     | 0'              | 385'   | 13.375"   | 48           | H40   | STC   | 4.37        | 9.82     | 17.42              | 29.27              |
| 12.25"                    | 0'              | 3445'  | 9.625"    | 36           | J55   | LTC   | 1.13        | 1.96     | 3.65               | 4.55               |
| 8.75"                     | 0'              | 10500' | 7"        | 26           | P110  | LTC   | 1.18        | 1.88     | 2.34               | 3.04               |
| 6.125"                    | 10300'          | 18787' | 4.5"      | 13.5         | P110  | LTC   | 1.84        | 2.14     | 2.95               | 3.68               |
| BLM Minimum Safety Factor |                 |        |           |              |       |       | 1.125       | 1        | 1.6 Dry<br>1.8 Wet | 1.6 Dry<br>1.8 Wet |

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.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.                                                                                                 |        |
| Is well located in SOPA but not in R-111-P?                                                                                                      | N      |
| If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?                       |        |
| Is well located in R-111-P and SOPA?                                                                                                             | Y      |
| If yes, are the first three strings cemented to surface?                                                                                         | Y      |
| Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?                                                                               | Y      |
| 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?                                                                                             |        |



|                                         |                                          |                     |
|-----------------------------------------|------------------------------------------|---------------------|
| Operator Name:<br>Mewbourne Oil Company | Property Name:<br>Forty Niner Ridge Unit | Well Number<br>123H |
|-----------------------------------------|------------------------------------------|---------------------|

## Kick Off Point (KOP)

|                        |               |                 |              |     |                          |                 |              |               |                |
|------------------------|---------------|-----------------|--------------|-----|--------------------------|-----------------|--------------|---------------|----------------|
| UL<br>F                | Section<br>16 | Township<br>23S | Range<br>30E | Lot | Feet<br>2396             | From N/S<br>FNL | Feet<br>1565 | From E/W<br>W | County<br>Eddy |
| Latitude<br>32.3057853 |               |                 |              |     | Longitude<br>103.8897931 |                 |              | NAD<br>83     |                |

## First Take Point (FTP)

|                        |               |                 |              |     |                          |               |              |               |                |
|------------------------|---------------|-----------------|--------------|-----|--------------------------|---------------|--------------|---------------|----------------|
| UL<br>K                | Section<br>16 | Township<br>23S | Range<br>30E | Lot | Feet<br>2325             | From N/S<br>S | Feet<br>1565 | From E/W<br>W | County<br>Eddy |
| Latitude<br>32.3042102 |               |                 |              |     | Longitude<br>103.8897998 |               |              | NAD<br>83     |                |

## Last Take Point (LTP)

|                        |               |                 |              |     |                          |               |              |               |                |
|------------------------|---------------|-----------------|--------------|-----|--------------------------|---------------|--------------|---------------|----------------|
| UL<br>N                | Section<br>21 | Township<br>23S | Range<br>30E | Lot | Feet<br>330              | From N/S<br>S | Feet<br>1565 | From E/W<br>W | County<br>Eddy |
| Latitude<br>32.2841393 |               |                 |              |     | Longitude<br>103.8898846 |               |              | NAD<br>83     |                |

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

Is this well an infill well?

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**

**Eddy County, New Mexico NAD 83**

**Forty Niner Ridge Unit #123H**

**Sec 16, T23S, R30E**

**SHL: 2465' FNL & 800' FWL (Sec 16)**

**BHL: 330' FSL & 1565' FWL (Sec 21)**

**Plan: Design #1**

## **Standard Planning Report**

**13 June, 2022**

## Planning Report

|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                              | <b>Local Co-ordinate Reference:</b> | Site Forty Niner Ridge Unit #123H      |
| <b>Company:</b>  | Mewbourne Oil Company              | <b>TVD Reference:</b>               | WELL @ 3200.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83     | <b>MD Reference:</b>                | WELL @ 3200.0usft (Original Well Elev) |
| <b>Site:</b>     | Forty Niner Ridge Unit #123H       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 16, T23S, R30E                 | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 330' FSL & 1565' FWL (Sec 21) |                                     |                                        |
| <b>Design:</b>   | Design #1                          |                                     |                                        |

|                    |                                |                      |              |
|--------------------|--------------------------------|----------------------|--------------|
| <b>Project</b>     | Eddy County, New Mexico NAD 83 |                      |              |
| <b>Map System:</b> | US State Plane 1983            | <b>System Datum:</b> | Ground Level |
| <b>Geo Datum:</b>  | North American Datum 1983      |                      |              |
| <b>Map Zone:</b>   | New Mexico Eastern Zone        |                      |              |

|                       |                              |           |              |         |            |              |
|-----------------------|------------------------------|-----------|--------------|---------|------------|--------------|
| Site                  | Forty Niner Ridge Unit #123H |           |              |         |            |              |
| Site Position:        |                              | Northing: | 475,194.50   | usft    | Latitude:  | 32.3056122   |
| From:                 | Map                          | Easting:  | 677,607.70   | usft    | Longitude: | -103.8922677 |
| Position Uncertainty: | 0.0                          | usft      | Slot Radius: | 13-3/16 | "          |              |

|                      |                    |          |                     |                 |               |              |
|----------------------|--------------------|----------|---------------------|-----------------|---------------|--------------|
| Well                 | Sec 16, T23S, R30E |          |                     |                 |               |              |
| Well Position        | +N/-S              | 0.0 usft | Northing:           | 475,194.50 usft | Latitude:     | 32.3056122   |
|                      | +E/-W              | 0.0 usft | Easting:            | 677,607.70 usft | Longitude:    | -103.8922677 |
| Position Uncertainty |                    | 0.0 usft | Wellhead Elevation: | 3,200.0 usft    | Ground Level: | 3,172.0 usft |
| Grid Convergence:    |                    | 0.24 °   |                     |                 |               |              |

|                  |                                    |                    |                        |                      |                            |
|------------------|------------------------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | BHL: 330' FSL & 1565' FWL (Sec 21) |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b>                  | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2010                           | 12/31/2014         | 7.30                   | 60.12                | 48,253.26727724            |

|                          |                                |                     |                      |                      |  |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|--|
| <b>Design</b>            | Design #1                      |                     |                      |                      |  |
| <b>Audit Notes:</b>      |                                |                     |                      |                      |  |
| <b>Version:</b>          | <b>Phase:</b>                  | PROTOTYPE           | <b>Tie On Depth:</b> | 0.0                  |  |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |  |
|                          | 0.0                            | 0.0                 | 0.0                  | 174.38               |  |

|                                 |                        |                          |                                 |                |  |
|---------------------------------|------------------------|--------------------------|---------------------------------|----------------|--|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 6/13/2022                |                                 |                |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>                | <b>Remarks</b> |  |
| 1                               | 0.0                    | 18,787.3                 | Design #1 (BHL: 330' FSL & 1565 |                |  |

|                              |                        |                    |                              |                     |                     |                                |                               |                              |                |                        |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|-------------------------------|------------------------------|----------------|------------------------|
| <b>Plan Sections</b>         |                        |                    |                              |                     |                     |                                |                               |                              |                |                        |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> | <b>TFO (°)</b> | <b>Target</b>          |
| 0.0                          | 0.00                   | 0.00               | 0.0                          | 0.0                 | 0.0                 | 0.00                           | 0.00                          | 0.00                         | 0.00           |                        |
| 100.0                        | 0.00                   | 0.00               | 100.0                        | 0.0                 | 0.0                 | 0.00                           | 0.00                          | 0.00                         | 0.00           |                        |
| 314.2                        | 4.28                   | 85.06              | 314.0                        | 0.7                 | 8.0                 | 2.00                           | 2.00                          | 0.00                         | 85.06          |                        |
| 10,371.3                     | 4.28                   | 85.06              | 10,343.0                     | 65.4                | 756.3               | 0.00                           | 0.00                          | 0.00                         | 0.00           |                        |
| 10,585.5                     | 0.00                   | 0.00               | 10,557.0                     | 66.1                | 764.3               | 2.00                           | -2.00                         | 0.00                         | 180.00         | KOP: 2396' FNL & 1565' |
| 11,485.6                     | 90.00                  | 179.97             | 11,130.0                     | -506.9              | 764.6               | 10.00                          | 10.00                         | 0.00                         | 179.97         |                        |
| 18,787.3                     | 90.00                  | 179.97             | 11,130.0                     | -7,808.6            | 768.6               | 0.00                           | 0.00                          | 0.00                         | 0.00           | BHL: 330' FSL & 1565'  |

## Planning Report

|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                              | <b>Local Co-ordinate Reference:</b> | Site Forty Niner Ridge Unit #123H      |
| <b>Company:</b>  | Mewbourne Oil Company              | <b>TVD Reference:</b>               | WELL @ 3200.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83     | <b>MD Reference:</b>                | WELL @ 3200.0usft (Original Well Elev) |
| <b>Site:</b>     | Forty Niner Ridge Unit #123H       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 16, T23S, R30E                 | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 330' FSL & 1565' FWL (Sec 21) |                                     |                                        |
| <b>Design:</b>   | 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: 2465' FNL & 800' FWL (Sec 16) |                 |             |                       |              |              |                         |                         |                        |                       |
| 100.0                              | 0.00            | 0.00        | 100.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 200.0                              | 2.00            | 85.06       | 200.0                 | 0.2          | 1.7          | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 300.0                              | 4.00            | 85.06       | 299.8                 | 0.6          | 7.0          | 0.1                     | 2.00                    | 2.00                   | 0.00                  |
| 314.2                              | 4.28            | 85.06       | 314.0                 | 0.7          | 8.0          | 0.1                     | 2.00                    | 2.00                   | 0.00                  |
| 400.0                              | 4.28            | 85.06       | 399.6                 | 1.2          | 14.4         | 0.2                     | 0.00                    | 0.00                   | 0.00                  |
| 500.0                              | 4.28            | 85.06       | 499.3                 | 1.9          | 21.8         | 0.3                     | 0.00                    | 0.00                   | 0.00                  |
| 600.0                              | 4.28            | 85.06       | 599.0                 | 2.5          | 29.2         | 0.3                     | 0.00                    | 0.00                   | 0.00                  |
| 700.0                              | 4.28            | 85.06       | 698.7                 | 3.2          | 36.7         | 0.4                     | 0.00                    | 0.00                   | 0.00                  |
| 800.0                              | 4.28            | 85.06       | 798.4                 | 3.8          | 44.1         | 0.5                     | 0.00                    | 0.00                   | 0.00                  |
| 900.0                              | 4.28            | 85.06       | 898.2                 | 4.5          | 51.6         | 0.6                     | 0.00                    | 0.00                   | 0.00                  |
| 1,000.0                            | 4.28            | 85.06       | 997.9                 | 5.1          | 59.0         | 0.7                     | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0                            | 4.28            | 85.06       | 1,097.6               | 5.7          | 66.4         | 0.8                     | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0                            | 4.28            | 85.06       | 1,197.3               | 6.4          | 73.9         | 0.9                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0                            | 4.28            | 85.06       | 1,297.0               | 7.0          | 81.3         | 1.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0                            | 4.28            | 85.06       | 1,396.8               | 7.7          | 88.8         | 1.1                     | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0                            | 4.28            | 85.06       | 1,496.5               | 8.3          | 96.2         | 1.1                     | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0                            | 4.28            | 85.06       | 1,596.2               | 9.0          | 103.7        | 1.2                     | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0                            | 4.28            | 85.06       | 1,695.9               | 9.6          | 111.1        | 1.3                     | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0                            | 4.28            | 85.06       | 1,795.7               | 10.3         | 118.5        | 1.4                     | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0                            | 4.28            | 85.06       | 1,895.4               | 10.9         | 126.0        | 1.5                     | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0                            | 4.28            | 85.06       | 1,995.1               | 11.5         | 133.4        | 1.6                     | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0                            | 4.28            | 85.06       | 2,094.8               | 12.2         | 140.9        | 1.7                     | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0                            | 4.28            | 85.06       | 2,194.5               | 12.8         | 148.3        | 1.8                     | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0                            | 4.28            | 85.06       | 2,294.3               | 13.5         | 155.7        | 1.9                     | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0                            | 4.28            | 85.06       | 2,394.0               | 14.1         | 163.2        | 1.9                     | 0.00                    | 0.00                   | 0.00                  |
| 2,500.0                            | 4.28            | 85.06       | 2,493.7               | 14.8         | 170.6        | 2.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,600.0                            | 4.28            | 85.06       | 2,593.4               | 15.4         | 178.1        | 2.1                     | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0                            | 4.28            | 85.06       | 2,693.1               | 16.0         | 185.5        | 2.2                     | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0                            | 4.28            | 85.06       | 2,792.9               | 16.7         | 192.9        | 2.3                     | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0                            | 4.28            | 85.06       | 2,892.6               | 17.3         | 200.4        | 2.4                     | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0                            | 4.28            | 85.06       | 2,992.3               | 18.0         | 207.8        | 2.5                     | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0                            | 4.28            | 85.06       | 3,092.0               | 18.6         | 215.3        | 2.6                     | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0                            | 4.28            | 85.06       | 3,191.7               | 19.3         | 222.7        | 2.6                     | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0                            | 4.28            | 85.06       | 3,291.5               | 19.9         | 230.1        | 2.7                     | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0                            | 4.28            | 85.06       | 3,391.2               | 20.5         | 237.6        | 2.8                     | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0                            | 4.28            | 85.06       | 3,490.9               | 21.2         | 245.0        | 2.9                     | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0                            | 4.28            | 85.06       | 3,590.6               | 21.8         | 252.5        | 3.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0                            | 4.28            | 85.06       | 3,690.3               | 22.5         | 259.9        | 3.1                     | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0                            | 4.28            | 85.06       | 3,790.1               | 23.1         | 267.4        | 3.2                     | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0                            | 4.28            | 85.06       | 3,889.8               | 23.8         | 274.8        | 3.3                     | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0                            | 4.28            | 85.06       | 3,989.5               | 24.4         | 282.2        | 3.4                     | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0                            | 4.28            | 85.06       | 4,089.2               | 25.1         | 289.7        | 3.4                     | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0                            | 4.28            | 85.06       | 4,188.9               | 25.7         | 297.1        | 3.5                     | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0                            | 4.28            | 85.06       | 4,288.7               | 26.3         | 304.6        | 3.6                     | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0                            | 4.28            | 85.06       | 4,388.4               | 27.0         | 312.0        | 3.7                     | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0                            | 4.28            | 85.06       | 4,488.1               | 27.6         | 319.4        | 3.8                     | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0                            | 4.28            | 85.06       | 4,587.8               | 28.3         | 326.9        | 3.9                     | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0                            | 4.28            | 85.06       | 4,687.6               | 28.9         | 334.3        | 4.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0                            | 4.28            | 85.06       | 4,787.3               | 29.6         | 341.8        | 4.1                     | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0                            | 4.28            | 85.06       | 4,887.0               | 30.2         | 349.2        | 4.2                     | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0                            | 4.28            | 85.06       | 4,986.7               | 30.8         | 356.6        | 4.2                     | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0                            | 4.28            | 85.06       | 5,086.4               | 31.5         | 364.1        | 4.3                     | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                              | <b>Local Co-ordinate Reference:</b> | Site Forty Niner Ridge Unit #123H      |
| <b>Company:</b>  | Mewbourne Oil Company              | <b>TVD Reference:</b>               | WELL @ 3200.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83     | <b>MD Reference:</b>                | WELL @ 3200.0usft (Original Well Elev) |
| <b>Site:</b>     | Forty Niner Ridge Unit #123H       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 16, T23S, R30E                 | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 330' FSL & 1565' FWL (Sec 21) |                                     |                                        |
| <b>Design:</b>   | 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               | 4.28            | 85.06       | 5,186.2               | 32.1         | 371.5        | 4.4                     | 0.00                    | 0.00                   | 0.00                  |
| 5,300.0               | 4.28            | 85.06       | 5,285.9               | 32.8         | 379.0        | 4.5                     | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0               | 4.28            | 85.06       | 5,385.6               | 33.4         | 386.4        | 4.6                     | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0               | 4.28            | 85.06       | 5,485.3               | 34.1         | 393.9        | 4.7                     | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0               | 4.28            | 85.06       | 5,585.0               | 34.7         | 401.3        | 4.8                     | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0               | 4.28            | 85.06       | 5,684.8               | 35.3         | 408.7        | 4.9                     | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0               | 4.28            | 85.06       | 5,784.5               | 36.0         | 416.2        | 4.9                     | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0               | 4.28            | 85.06       | 5,884.2               | 36.6         | 423.6        | 5.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0               | 4.28            | 85.06       | 5,983.9               | 37.3         | 431.1        | 5.1                     | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0               | 4.28            | 85.06       | 6,083.6               | 37.9         | 438.5        | 5.2                     | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0               | 4.28            | 85.06       | 6,183.4               | 38.6         | 445.9        | 5.3                     | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0               | 4.28            | 85.06       | 6,283.1               | 39.2         | 453.4        | 5.4                     | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0               | 4.28            | 85.06       | 6,382.8               | 39.9         | 460.8        | 5.5                     | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0               | 4.28            | 85.06       | 6,482.5               | 40.5         | 468.3        | 5.6                     | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0               | 4.28            | 85.06       | 6,582.2               | 41.1         | 475.7        | 5.7                     | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0               | 4.28            | 85.06       | 6,682.0               | 41.8         | 483.1        | 5.7                     | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0               | 4.28            | 85.06       | 6,781.7               | 42.4         | 490.6        | 5.8                     | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0               | 4.28            | 85.06       | 6,881.4               | 43.1         | 498.0        | 5.9                     | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0               | 4.28            | 85.06       | 6,981.1               | 43.7         | 505.5        | 6.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0               | 4.28            | 85.06       | 7,080.8               | 44.4         | 512.9        | 6.1                     | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0               | 4.28            | 85.06       | 7,180.6               | 45.0         | 520.3        | 6.2                     | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0               | 4.28            | 85.06       | 7,280.3               | 45.6         | 527.8        | 6.3                     | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0               | 4.28            | 85.06       | 7,380.0               | 46.3         | 535.2        | 6.4                     | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0               | 4.28            | 85.06       | 7,479.7               | 46.9         | 542.7        | 6.5                     | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0               | 4.28            | 85.06       | 7,579.5               | 47.6         | 550.1        | 6.5                     | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0               | 4.28            | 85.06       | 7,679.2               | 48.2         | 557.6        | 6.6                     | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0               | 4.28            | 85.06       | 7,778.9               | 48.9         | 565.0        | 6.7                     | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0               | 4.28            | 85.06       | 7,878.6               | 49.5         | 572.4        | 6.8                     | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0               | 4.28            | 85.06       | 7,978.3               | 50.2         | 579.9        | 6.9                     | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0               | 4.28            | 85.06       | 8,078.1               | 50.8         | 587.3        | 7.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0               | 4.28            | 85.06       | 8,177.8               | 51.4         | 594.8        | 7.1                     | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0               | 4.28            | 85.06       | 8,277.5               | 52.1         | 602.2        | 7.2                     | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0               | 4.28            | 85.06       | 8,377.2               | 52.7         | 609.6        | 7.2                     | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0               | 4.28            | 85.06       | 8,476.9               | 53.4         | 617.1        | 7.3                     | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0               | 4.28            | 85.06       | 8,576.7               | 54.0         | 624.5        | 7.4                     | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0               | 4.28            | 85.06       | 8,676.4               | 54.7         | 632.0        | 7.5                     | 0.00                    | 0.00                   | 0.00                  |
| 8,800.0               | 4.28            | 85.06       | 8,776.1               | 55.3         | 639.4        | 7.6                     | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0               | 4.28            | 85.06       | 8,875.8               | 55.9         | 646.8        | 7.7                     | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0               | 4.28            | 85.06       | 8,975.5               | 56.6         | 654.3        | 7.8                     | 0.00                    | 0.00                   | 0.00                  |
| 9,100.0               | 4.28            | 85.06       | 9,075.3               | 57.2         | 661.7        | 7.9                     | 0.00                    | 0.00                   | 0.00                  |
| 9,200.0               | 4.28            | 85.06       | 9,175.0               | 57.9         | 669.2        | 8.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,300.0               | 4.28            | 85.06       | 9,274.7               | 58.5         | 676.6        | 8.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0               | 4.28            | 85.06       | 9,374.4               | 59.2         | 684.1        | 8.1                     | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0               | 4.28            | 85.06       | 9,474.1               | 59.8         | 691.5        | 8.2                     | 0.00                    | 0.00                   | 0.00                  |
| 9,600.0               | 4.28            | 85.06       | 9,573.9               | 60.4         | 698.9        | 8.3                     | 0.00                    | 0.00                   | 0.00                  |
| 9,700.0               | 4.28            | 85.06       | 9,673.6               | 61.1         | 706.4        | 8.4                     | 0.00                    | 0.00                   | 0.00                  |
| 9,800.0               | 4.28            | 85.06       | 9,773.3               | 61.7         | 713.8        | 8.5                     | 0.00                    | 0.00                   | 0.00                  |
| 9,900.0               | 4.28            | 85.06       | 9,873.0               | 62.4         | 721.3        | 8.6                     | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0              | 4.28            | 85.06       | 9,972.7               | 63.0         | 728.7        | 8.7                     | 0.00                    | 0.00                   | 0.00                  |
| 10,100.0              | 4.28            | 85.06       | 10,072.5              | 63.7         | 736.1        | 8.8                     | 0.00                    | 0.00                   | 0.00                  |
| 10,200.0              | 4.28            | 85.06       | 10,172.2              | 64.3         | 743.6        | 8.8                     | 0.00                    | 0.00                   | 0.00                  |
| 10,300.0              | 4.28            | 85.06       | 10,271.9              | 65.0         | 751.0        | 8.9                     | 0.00                    | 0.00                   | 0.00                  |
| 10,371.3              | 4.28            | 85.06       | 10,343.0              | 65.4         | 756.3        | 9.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0              | 3.71            | 85.06       | 10,371.6              | 65.6         | 758.3        | 9.0                     | 2.00                    | -2.00                  | 0.00                  |

## Planning Report

|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                              | <b>Local Co-ordinate Reference:</b> | Site Forty Niner Ridge Unit #123H      |
| <b>Company:</b>  | Mewbourne Oil Company              | <b>TVD Reference:</b>               | WELL @ 3200.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83     | <b>MD Reference:</b>                | WELL @ 3200.0usft (Original Well Elev) |
| <b>Site:</b>     | Forty Niner Ridge Unit #123H       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 16, T23S, R30E                 | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 330' FSL & 1565' FWL (Sec 21) |                                     |                                        |
| <b>Design:</b>   | 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                                          | 1.71            | 85.06       | 10,471.5              | 66.0         | 763.0        | 9.1                     | 2.00                    | -2.00                  | 0.00                  |  |
| 10,585.5                                          | 0.00            | 0.00        | 10,557.0              | 66.1         | 764.3        | 9.1                     | 2.00                    | -2.00                  | 0.00                  |  |
| <b>KOP: 2396' FNL &amp; 1565' FWL (Sec 16)</b>    |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 10,600.0                                          | 1.45            | 179.97      | 10,571.5              | 65.9         | 764.3        | 9.3                     | 10.00                   | 10.00                  | 0.00                  |  |
| 10,650.0                                          | 6.45            | 179.97      | 10,621.4              | 62.5         | 764.3        | 12.7                    | 10.00                   | 10.00                  | 0.00                  |  |
| 10,700.0                                          | 11.45           | 179.97      | 10,670.8              | 54.7         | 764.3        | 20.4                    | 10.00                   | 10.00                  | 0.00                  |  |
| 10,750.0                                          | 16.45           | 179.97      | 10,719.3              | 42.6         | 764.3        | 32.4                    | 10.00                   | 10.00                  | 0.00                  |  |
| 10,800.0                                          | 21.45           | 179.97      | 10,766.5              | 26.4         | 764.3        | 48.6                    | 10.00                   | 10.00                  | 0.00                  |  |
| 10,850.0                                          | 26.45           | 179.97      | 10,812.2              | 6.1          | 764.3        | 68.8                    | 10.00                   | 10.00                  | 0.00                  |  |
| 10,900.0                                          | 31.45           | 179.97      | 10,856.0              | -18.1        | 764.3        | 92.9                    | 10.00                   | 10.00                  | 0.00                  |  |
| 10,950.0                                          | 36.45           | 179.97      | 10,897.4              | -46.0        | 764.4        | 120.6                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,000.0                                          | 41.45           | 179.97      | 10,936.3              | -77.4        | 764.4        | 151.9                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,050.0                                          | 46.45           | 179.97      | 10,972.3              | -112.1       | 764.4        | 186.4                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,100.0                                          | 51.45           | 179.97      | 11,005.1              | -149.8       | 764.4        | 223.9                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,150.0                                          | 56.45           | 179.97      | 11,034.5              | -190.2       | 764.4        | 264.2                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,200.0                                          | 61.45           | 179.97      | 11,060.3              | -233.0       | 764.5        | 306.8                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,250.0                                          | 66.45           | 179.97      | 11,082.3              | -277.9       | 764.5        | 351.5                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,300.0                                          | 71.45           | 179.97      | 11,100.2              | -324.6       | 764.5        | 397.9                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,350.0                                          | 76.45           | 179.97      | 11,114.0              | -372.6       | 764.5        | 445.7                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,400.0                                          | 81.45           | 179.97      | 11,123.6              | -421.7       | 764.6        | 494.5                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,450.0                                          | 86.44           | 179.97      | 11,128.9              | -471.4       | 764.6        | 544.0                   | 10.00                   | 10.00                  | 0.00                  |  |
| 11,485.6                                          | 90.00           | 179.97      | 11,130.0              | -506.9       | 764.6        | 579.4                   | 10.00                   | 10.00                  | 0.00                  |  |
| <b>FTP/LP: 2325' FSL &amp; 1565' FWL (Sec 16)</b> |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 11,500.0                                          | 90.00           | 179.97      | 11,130.0              | -521.3       | 764.6        | 593.7                   | 0.00                    | 0.00                   | 0.00                  |  |
| 11,600.0                                          | 90.00           | 179.97      | 11,130.0              | -621.3       | 764.7        | 693.3                   | 0.00                    | 0.00                   | 0.00                  |  |
| 11,700.0                                          | 90.00           | 179.97      | 11,130.0              | -721.3       | 764.7        | 792.8                   | 0.00                    | 0.00                   | 0.00                  |  |
| 11,800.0                                          | 90.00           | 179.97      | 11,130.0              | -821.3       | 764.8        | 892.3                   | 0.00                    | 0.00                   | 0.00                  |  |
| 11,900.0                                          | 90.00           | 179.97      | 11,130.0              | -921.3       | 764.8        | 991.8                   | 0.00                    | 0.00                   | 0.00                  |  |
| 12,000.0                                          | 90.00           | 179.97      | 11,130.0              | -1,021.3     | 764.9        | 1,091.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,100.0                                          | 90.00           | 179.97      | 11,130.0              | -1,121.3     | 764.9        | 1,190.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,200.0                                          | 90.00           | 179.97      | 11,130.0              | -1,221.3     | 765.0        | 1,290.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,300.0                                          | 90.00           | 179.97      | 11,130.0              | -1,321.3     | 765.1        | 1,389.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,400.0                                          | 90.00           | 179.97      | 11,130.0              | -1,421.3     | 765.1        | 1,489.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,500.0                                          | 90.00           | 179.97      | 11,130.0              | -1,521.3     | 765.2        | 1,589.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,600.0                                          | 90.00           | 179.97      | 11,130.0              | -1,621.3     | 765.2        | 1,688.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,700.0                                          | 90.00           | 179.97      | 11,130.0              | -1,721.3     | 765.3        | 1,788.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,800.0                                          | 90.00           | 179.97      | 11,130.0              | -1,821.3     | 765.3        | 1,887.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,900.0                                          | 90.00           | 179.97      | 11,130.0              | -1,921.3     | 765.4        | 1,987.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,000.0                                          | 90.00           | 179.97      | 11,130.0              | -2,021.3     | 765.4        | 2,086.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,100.0                                          | 90.00           | 179.97      | 11,130.0              | -2,121.3     | 765.5        | 2,186.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,200.0                                          | 90.00           | 179.97      | 11,130.0              | -2,221.3     | 765.5        | 2,285.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,300.0                                          | 90.00           | 179.97      | 11,130.0              | -2,321.3     | 765.6        | 2,385.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,400.0                                          | 90.00           | 179.97      | 11,130.0              | -2,421.3     | 765.7        | 2,484.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,500.0                                          | 90.00           | 179.97      | 11,130.0              | -2,521.3     | 765.7        | 2,584.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,600.0                                          | 90.00           | 179.97      | 11,130.0              | -2,621.3     | 765.8        | 2,683.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,700.0                                          | 90.00           | 179.97      | 11,130.0              | -2,721.3     | 765.8        | 2,783.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,800.0                                          | 90.00           | 179.97      | 11,130.0              | -2,821.3     | 765.9        | 2,882.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,900.0                                          | 90.00           | 179.97      | 11,130.0              | -2,921.3     | 765.9        | 2,982.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,000.0                                          | 90.00           | 179.97      | 11,130.0              | -3,021.3     | 766.0        | 3,081.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,100.0                                          | 90.00           | 179.97      | 11,130.0              | -3,121.3     | 766.0        | 3,181.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,200.0                                          | 90.00           | 179.97      | 11,130.0              | -3,221.3     | 766.1        | 3,280.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,300.0                                          | 90.00           | 179.97      | 11,130.0              | -3,321.3     | 766.1        | 3,380.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,400.0                                          | 90.00           | 179.97      | 11,130.0              | -3,421.3     | 766.2        | 3,479.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,500.0                                          | 90.00           | 179.97      | 11,130.0              | -3,521.3     | 766.3        | 3,579.5                 | 0.00                    | 0.00                   | 0.00                  |  |

## Planning Report

|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                              | <b>Local Co-ordinate Reference:</b> | Site Forty Niner Ridge Unit #123H      |
| <b>Company:</b>  | Mewbourne Oil Company              | <b>TVD Reference:</b>               | WELL @ 3200.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83     | <b>MD Reference:</b>                | WELL @ 3200.0usft (Original Well Elev) |
| <b>Site:</b>     | Forty Niner Ridge Unit #123H       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 16, T23S, R30E                 | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 330' FSL & 1565' FWL (Sec 21) |                                     |                                        |
| <b>Design:</b>   | 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) |
| 14,600.0                             | 90.00           | 179.97      | 11,130.0              | -3,621.3     | 766.3        | 3,679.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0                             | 90.00           | 179.97      | 11,130.0              | -3,721.3     | 766.4        | 3,778.5                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0                             | 90.00           | 179.97      | 11,130.0              | -3,821.3     | 766.4        | 3,878.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0                             | 90.00           | 179.97      | 11,130.0              | -3,921.3     | 766.5        | 3,977.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,000.0                             | 90.00           | 179.97      | 11,130.0              | -4,021.3     | 766.5        | 4,077.1                 | 0.00                    | 0.00                   | 0.00                  |
| 15,100.0                             | 90.00           | 179.97      | 11,130.0              | -4,121.3     | 766.6        | 4,176.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,200.0                             | 90.00           | 179.97      | 11,130.0              | -4,221.3     | 766.6        | 4,276.1                 | 0.00                    | 0.00                   | 0.00                  |
| 15,300.0                             | 90.00           | 179.97      | 11,130.0              | -4,321.3     | 766.7        | 4,375.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,400.0                             | 90.00           | 179.97      | 11,130.0              | -4,421.3     | 766.8        | 4,475.2                 | 0.00                    | 0.00                   | 0.00                  |
| 15,500.0                             | 90.00           | 179.97      | 11,130.0              | -4,521.3     | 766.8        | 4,574.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,600.0                             | 90.00           | 179.97      | 11,130.0              | -4,621.3     | 766.9        | 4,674.2                 | 0.00                    | 0.00                   | 0.00                  |
| 15,700.0                             | 90.00           | 179.97      | 11,130.0              | -4,721.3     | 766.9        | 4,773.8                 | 0.00                    | 0.00                   | 0.00                  |
| 15,800.0                             | 90.00           | 179.97      | 11,130.0              | -4,821.3     | 767.0        | 4,873.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,900.0                             | 90.00           | 179.97      | 11,130.0              | -4,921.3     | 767.0        | 4,972.8                 | 0.00                    | 0.00                   | 0.00                  |
| 16,000.0                             | 90.00           | 179.97      | 11,130.0              | -5,021.3     | 767.1        | 5,072.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,100.0                             | 90.00           | 179.97      | 11,130.0              | -5,121.3     | 767.1        | 5,171.9                 | 0.00                    | 0.00                   | 0.00                  |
| 16,200.0                             | 90.00           | 179.97      | 11,130.0              | -5,221.3     | 767.2        | 5,271.4                 | 0.00                    | 0.00                   | 0.00                  |
| 16,300.0                             | 90.00           | 179.97      | 11,130.0              | -5,321.3     | 767.2        | 5,370.9                 | 0.00                    | 0.00                   | 0.00                  |
| 16,400.0                             | 90.00           | 179.97      | 11,130.0              | -5,421.3     | 767.3        | 5,470.4                 | 0.00                    | 0.00                   | 0.00                  |
| 16,500.0                             | 90.00           | 179.97      | 11,130.0              | -5,521.3     | 767.4        | 5,570.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,600.0                             | 90.00           | 179.97      | 11,130.0              | -5,621.3     | 767.4        | 5,669.5                 | 0.00                    | 0.00                   | 0.00                  |
| 16,700.0                             | 90.00           | 179.97      | 11,130.0              | -5,721.3     | 767.5        | 5,769.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,800.0                             | 90.00           | 179.97      | 11,130.0              | -5,821.3     | 767.5        | 5,868.5                 | 0.00                    | 0.00                   | 0.00                  |
| 16,900.0                             | 90.00           | 179.97      | 11,130.0              | -5,921.3     | 767.6        | 5,968.1                 | 0.00                    | 0.00                   | 0.00                  |
| 17,000.0                             | 90.00           | 179.97      | 11,130.0              | -6,021.3     | 767.6        | 6,067.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,100.0                             | 90.00           | 179.97      | 11,130.0              | -6,121.3     | 767.7        | 6,167.1                 | 0.00                    | 0.00                   | 0.00                  |
| 17,200.0                             | 90.00           | 179.97      | 11,130.0              | -6,221.3     | 767.7        | 6,266.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,300.0                             | 90.00           | 179.97      | 11,130.0              | -6,321.3     | 767.8        | 6,366.2                 | 0.00                    | 0.00                   | 0.00                  |
| 17,400.0                             | 90.00           | 179.97      | 11,130.0              | -6,421.3     | 767.8        | 6,465.7                 | 0.00                    | 0.00                   | 0.00                  |
| 17,500.0                             | 90.00           | 179.97      | 11,130.0              | -6,521.3     | 767.9        | 6,565.2                 | 0.00                    | 0.00                   | 0.00                  |
| 17,600.0                             | 90.00           | 179.97      | 11,130.0              | -6,621.3     | 768.0        | 6,664.7                 | 0.00                    | 0.00                   | 0.00                  |
| 17,700.0                             | 90.00           | 179.97      | 11,130.0              | -6,721.3     | 768.0        | 6,764.2                 | 0.00                    | 0.00                   | 0.00                  |
| 17,791.6                             | 90.00           | 179.97      | 11,130.0              | -6,812.9     | 768.1        | 6,855.4                 | 0.00                    | 0.00                   | 0.00                  |
| PPP2: 1325' FSL & 1565' FWL (Sec 21) |                 |             |                       |              |              |                         |                         |                        |                       |
| 17,800.0                             | 90.00           | 179.97      | 11,130.0              | -6,821.3     | 768.1        | 6,863.8                 | 0.00                    | 0.00                   | 0.00                  |
| 17,900.0                             | 90.00           | 179.97      | 11,130.0              | -6,921.3     | 768.1        | 6,963.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,000.0                             | 90.00           | 179.97      | 11,130.0              | -7,021.3     | 768.2        | 7,062.8                 | 0.00                    | 0.00                   | 0.00                  |
| 18,100.0                             | 90.00           | 179.97      | 11,130.0              | -7,121.3     | 768.2        | 7,162.3                 | 0.00                    | 0.00                   | 0.00                  |
| 18,200.0                             | 90.00           | 179.97      | 11,130.0              | -7,221.3     | 768.3        | 7,261.9                 | 0.00                    | 0.00                   | 0.00                  |
| 18,300.0                             | 90.00           | 179.97      | 11,130.0              | -7,321.3     | 768.3        | 7,361.4                 | 0.00                    | 0.00                   | 0.00                  |
| 18,400.0                             | 90.00           | 179.97      | 11,130.0              | -7,421.3     | 768.4        | 7,460.9                 | 0.00                    | 0.00                   | 0.00                  |
| 18,500.0                             | 90.00           | 179.97      | 11,130.0              | -7,521.3     | 768.4        | 7,560.4                 | 0.00                    | 0.00                   | 0.00                  |
| 18,600.0                             | 90.00           | 179.97      | 11,130.0              | -7,621.3     | 768.5        | 7,660.0                 | 0.00                    | 0.00                   | 0.00                  |
| 18,700.0                             | 90.00           | 179.97      | 11,130.0              | -7,721.3     | 768.6        | 7,759.5                 | 0.00                    | 0.00                   | 0.00                  |
| 18,787.3                             | 90.00           | 179.97      | 11,130.0              | -7,808.6     | 768.6        | 7,846.3                 | 0.00                    | 0.00                   | 0.00                  |
| BHL: 330' FSL & 1565' FWL (Sec 21)   |                 |             |                       |              |              |                         |                         |                        |                       |

## Planning Report

|                  |                                    |                                     |                                        |
|------------------|------------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                              | <b>Local Co-ordinate Reference:</b> | Site Forty Niner Ridge Unit #123H      |
| <b>Company:</b>  | Mewbourne Oil Company              | <b>TVD Reference:</b>               | WELL @ 3200.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83     | <b>MD Reference:</b>                | WELL @ 3200.0usft (Original Well Elev) |
| <b>Site:</b>     | Forty Niner Ridge Unit #123H       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 16, T23S, R30E                 | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 330' FSL & 1565' FWL (Sec 21) |                                     |                                        |
| <b>Design:</b>   | Design #1                          |                                     |                                        |

| Design Targets                                                    |                  |                 |               |                 |                 |                    |                   |            |              |
|-------------------------------------------------------------------|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|------------|--------------|
| Target Name<br>- hit/miss target<br>- Shape                       | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Northing<br>(usft) | Easting<br>(usft) | Latitude   | Longitude    |
| SHL: 2465' FNL & 800' I<br>- plan hits target center<br>- Point   | 0.00             | 0.00            | 0.0           | 0.0             | 0.0             | 475,194.50         | 677,607.70        | 32.3056122 | -103.8922677 |
| KOP: 2396' FNL & 1565'<br>- plan hits target center<br>- Point    | 0.00             | 0.00            | 10,557.0      | 66.1            | 764.3           | 475,260.60         | 678,372.00        | 32.3057853 | -103.8897931 |
| BHL: 330' FSL & 1565' F<br>- plan hits target center<br>- Point   | 0.00             | 0.00            | 11,130.0      | -7,808.6        | 768.6           | 467,385.90         | 678,376.30        | 32.2841393 | -103.8898846 |
| PPP2: 1325' FSL & 1565'<br>- plan hits target center<br>- Point   | 0.00             | 0.00            | 11,130.0      | -6,812.9        | 768.1           | 468,381.60         | 678,375.75        | 32.2868763 | -103.8898730 |
| FTP/LP: 2325' FSL & 1565'<br>- plan hits target center<br>- Point | 0.00             | 0.00            | 11,130.0      | -506.9          | 764.6           | 474,687.60         | 678,372.31        | 32.3042102 | -103.8897998 |

API ID: 104000676603  
Operator Name: MEWBOURNE OIL COMPANY  
WELL NAME: FORTY NINER RIDGE UNIT  
WELL TYPE: GAS WELL

SUBMISSION DATE: 06/13/2022  
  
WELL NUMBER: 123H  
WELL WORK TYPE: DRILL

**\*\*Proposed Operational Changes\*\***  
SHL Change: Yes  
BHL Change: Yes  
Zone Change: Yes  
Csg Design: Yes  
Cmt Design: Yes  
Circulating Medium Depths: Yes

Section 1 - Geologic Formations

| Formation Name   | Elevation | True Vertical Depth | Measured Depth | Lithologies               | Mineral Resources | Producing Formation |
|------------------|-----------|---------------------|----------------|---------------------------|-------------------|---------------------|
| Unknown          | 3172      | 28                  | 28             | Other: Topsoil            | NONE              | N                   |
| Salt Top         | 2772      | 400                 | 400            | SALT                      | NONE              | N                   |
| Salt Base        | -198      | 3370                | 3370           | SALT                      | NONE              | N                   |
| Lamar            | -348      | 3520                | 3520           | LIMESTONE                 | Natural Gas, Oil  | N                   |
| Bell Canyon      | -378      | 3550                | 3550           | SANDSTONE                 | Natural Gas, Oil  | N                   |
| Cherry Canyon    | -1278     | 4450                | 4450           | SANDSTONE                 | Natural Gas, Oil  | N                   |
| Mancanita        | -1448     | 4620                | 4620           | LIMESTONE                 | Natural Gas, Oil  | N                   |
| Brushy Canyon    | -3928     | 7100                | 7100           | SANDSTONE                 | Natural Gas, Oil  | N                   |
| Bone Springs     | -4288     | 7460                | 7460           | SHALE/LIMESTONE           | Natural Gas, Oil  | N                   |
| Bone Springs 1st | -5228     | 8400                | 8400           | SANDSTONE                 | Natural Gas, Oil  | N                   |
| Bone Springs 2nd | -5828     | 9000                | 9000           | SANDSTONE                 | Natural Gas, Oil  | N                   |
| Bone Springs 3rd | -7128     | 10300               | 10300          | SANDSTONE                 | Natural Gas, Oil  | N                   |
| Wolfcamp         | -7528     | 10700               | 10700          | SHALE/LIMESTONE/SANDSTONE | Natural Gas, Oil  | Y                   |

Section 2 - Blowout Prevention

Pressure Rating: 5M  
Equipment: Annular, Pipe Rams, Blind Rams  
Requesting Variance: YES  
Rating Depth: 18787  
Variance Request: Request variance for the use of a flexible choke line from the BOP to Choke Manifold. Anchors not required by manufacturer. A multi-bowl wellhead will be used. See attached schematic.  
Testing Procedure: BOP/PCP will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.  
Choke Diagrams: [Previously Attached](#)  
BOP Diagrams: [Previously Attached](#)

Section 3 - Casing

| Casing ID | String Type  | Hole Size | Csg Size | Condition | Standard | Tapered String | Top Set MD | Bottom Set MD | Top Set TVD | Bottom Set TVD | Top Set MSL | Bottom Set MSL | Calculated Csg Length MD | Grade | Weight | Joint Type | Collapses SF | Burst SF | Joint SF Type | Joint SF | Body SF Type | Body SF |
|-----------|--------------|-----------|----------|-----------|----------|----------------|------------|---------------|-------------|----------------|-------------|----------------|--------------------------|-------|--------|------------|--------------|----------|---------------|----------|--------------|---------|
| 1         | Surface      | 17.5"     | 13.375"  | New       | API      | N              | 0          | 385           | 0           | 385            | 3172        | 2787           | 385                      | H-40  | 48     | ST&C       | 4.37         | 9.82     | Dry           | 29.27    | Dry          | 29.27   |
| 2         | Intermediate | 12.25"    | 9.675"   | New       | API      | N              | 0          | 3445          | 0           | 3436           | 3172        | -264           | 3445                     | J-55  | 36     | LT&C       | 1.13         | 1.96     | Dry           | 3.65     | Dry          | 4.55    |
| 3         | Production   | 8.75"     | 7"       | New       | API      | N              | 0          | 10500         | 0           | 10471          | 3172        | -7299          | 10500                    | P-110 | 26     | LT&C       | 1.18         | 1.88     | Dry           | 2.34     | Dry          | 3.04    |
| 4         | Liner        | 6.125"    | 4.5"     | New       | API      | N              | 10300      | 18787         | 10271       | 11130          | -7099       | -7958          | 8487                     | P-110 | 13.5   | LT&C       | 1.84         | 2.14     | Dry           | 2.95     | Dry          | 3.68    |

Casing Attachments: [See Attached PDF](#)

Section 4 - Cement

| String Type  | Lead/Tail | Stage Tool Depth | Top MD | Bottom MD | Quantity (sa) | Yield | Density | Cu FT | Excess % | Cement Type | Additives                                                                  |
|--------------|-----------|------------------|--------|-----------|---------------|-------|---------|-------|----------|-------------|----------------------------------------------------------------------------|
| Surface      | Lead      |                  | 0      | 195       | 130           | 2.12  | 12.5    | 276   | 100      | Class C     | Salt, Gel Extender, LCM                                                    |
| Surface      | Tail      |                  | 195    | 385       | 200           | 1.34  | 14.8    | 268   | 25       | Class C     | Retarder                                                                   |
| Intermediate | Lead      |                  | 0      | 2761      | 510           | 2.12  | 12.5    | 1081  | 25       | Class C     | Salt, Gel Extender, LCM                                                    |
| Intermediate | Tail      |                  | 2761   | 3445      | 200           | 1.34  | 14.8    | 268   | 25       | Class C     | Retarder                                                                   |
| Production   | Lead      |                  | 0      | 7910      | 680           | 2.12  | 12.5    | 1442  | 25       | Class C     | Salt, Retarder, Defoamer, Extender                                         |
| Production   | Tail      |                  | 7910   | 10500     | 400           | 1.18  | 15.6    | 472   | 25       | Class H     | Retarder, Fluid Loss, Defoamer                                             |
| Liner        | Lead      |                  | 10300  | 18787     | 340           | 2.97  | 11.2    | 1010  | 25       | Class C     | Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent |

Section 5 - Circulating Medium

Mud System Type: Closed  
Will an air or gas system be used? No  
Describe What will be on location to control well or mitigate other conditions: Lost circulation material sweeps, mud scavengers in surface hole  
Describe the mud monitoring system utilized: Pason/PVT/Visual Monitoring

| Top Depth | Bottom Depth | Mud Type        | Min Weight (lb/gal) | Max Weight (lb/gal) | Density (lb/cu ft) | Gel Strength | PH | Viscosity | Salinity (ppm) | Filtration | Additives |
|-----------|--------------|-----------------|---------------------|---------------------|--------------------|--------------|----|-----------|----------------|------------|-----------|
| 0         | 385          | Spud            | 8.6                 | 8.8                 |                    |              |    |           |                |            |           |
| 385       | 3445         | Salt-Saturated  | 10                  | 10                  |                    |              |    |           |                |            |           |
| 3445      | 10500        | Water-Based Mud | 8.6                 | 9.7                 |                    |              |    |           |                |            |           |
| 10500     | 18787        | Oil-Based Mud   | 8.8                 | 10                  |                    |              |    |           |                |            |           |

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures: Will run GR/CNL in deeper offset Forty Niner Ridge Unit #122H  
List of open and cased hole logs run in the well: COMPENSATED NEUTRON LOG, DIRECTIONAL SURVEY, GAMMA RAY LOG, MEASUREMENT WHILE DRILL

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5788  
Anticipated Surface Pressure: 3339  
Anticipated Bottom Hole Temperature: 145  
Anticipated abnormal pressures, Temperatures, or potential geologic hazards? No  
Hydrogen sulfide drilling operations plan required? Yes  
Hydrogen sulfide drilling operations: [Previously Attached](#)

Section 8 - Other Information

Proposed Horizontal/directional/multi-lateral plan submission: [Please see attached](#)  
Other Proposed operations facets attachment: [Please see attached](#)

**District I**

1625 N. French Dr., Hobbs, NM 88240  
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**District II**

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**District IV**

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 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 133377

**CONDITIONS**

|                                                                   |                                                      |
|-------------------------------------------------------------------|------------------------------------------------------|
| Operator:<br>MEWBOURNE OIL CO<br>P.O. Box 5270<br>Hobbs, NM 88241 | OGRID:<br>14744                                      |
|                                                                   | Action Number:<br>133377                             |
|                                                                   | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

**CONDITIONS**

| Created By | Condition                                                             | Condition Date |
|------------|-----------------------------------------------------------------------|----------------|
| kpickford  | • NSP Will require administrative order for non-standard spacing unit | 8/12/2022      |
| kpickford  | Adhere to previous NMOCD Conditions of Approval                       | 8/12/2022      |