

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-101  
August 1, 2011

Permit 290946

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

|                                                                                      |                                              |                               |
|--------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------|
| 1. Operator Name and Address<br>MEWBOURNE OIL CO<br>P.O. Box 5270<br>Hobbs, NM 88241 |                                              | 2. OGRID Number<br>14744      |
|                                                                                      |                                              | 3. API Number<br>30-015-47914 |
| 4. Property Code<br>317856                                                           | 5. Property Name<br>CHICAGO 9 8 WOHE FEE COM | 6. Well No.<br>002H           |

**7. Surface Location**

|               |              |                 |              |              |                   |               |                  |               |                |
|---------------|--------------|-----------------|--------------|--------------|-------------------|---------------|------------------|---------------|----------------|
| UL - Lot<br>H | Section<br>9 | Township<br>24S | Range<br>28E | Lot Idn<br>H | Feet From<br>2120 | N/S Line<br>N | Feet From<br>330 | E/W Line<br>E | County<br>Eddy |
|---------------|--------------|-----------------|--------------|--------------|-------------------|---------------|------------------|---------------|----------------|

**8. Proposed Bottom Hole Location**

|               |              |                 |              |              |                   |               |                  |               |                |
|---------------|--------------|-----------------|--------------|--------------|-------------------|---------------|------------------|---------------|----------------|
| UL - Lot<br>E | Section<br>8 | Township<br>24S | Range<br>28E | Lot Idn<br>E | Feet From<br>1340 | N/S Line<br>N | Feet From<br>330 | E/W Line<br>W | County<br>Eddy |
|---------------|--------------|-----------------|--------------|--------------|-------------------|---------------|------------------|---------------|----------------|

**9. Pool Information**

|                            |       |
|----------------------------|-------|
| PURPLE SAGE;WOLFCAMP (GAS) | 98220 |
|----------------------------|-------|

**Additional Well Information**

|                           |                             |                                        |                           |                                    |
|---------------------------|-----------------------------|----------------------------------------|---------------------------|------------------------------------|
| 11. Work Type<br>New Well | 12. Well Type<br>GAS        | 13. Cable/Rotary                       | 14. Lease Type<br>Private | 15. Ground Level Elevation<br>3013 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>19578 | 18. Formation<br>Wolfcamp              | 19. Contractor            | 20. Spud Date<br>2/6/2021          |
| Depth to Ground water     |                             | Distance from nearest fresh water well |                           | Distance to nearest surface water  |

☒ We will be using a closed-loop system in lieu of lined pits

**21. Proposed Casing and Cement Program**

| Type   | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|--------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf   | 17.5      | 13.375      | 48               | 175           | 200             | 0             |
| Int1   | 12.25     | 9.625       | 36               | 2430          | 520             | 0             |
| Prod   | 8.75      | 7           | 26               | 9700          | 840             | 2230          |
| Liner1 | 6.125     | 4.5         | 13.5             | 19578         | 420             | 9020          |

**Casing/Cement Program: Additional Comments**

MOC proposed to drill & test the Wolfcamp formation. H2S rule 118 does not apply because MOC has researched the area & no high concentrations were found. Will have on location & working all H2S safety equipment before Yates formation for safety & insurance purposes. Will stimulate as needed for production.

**22. Proposed Blowout Prevention Program**

| Type       | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Annular    | 5000             | 2500          | Schaffer     |
| Double Ram | 5000             | 5000          | Schaffer     |
| Annular    | 5000             | 2500          | Schaffer     |

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:

Printed Name: Electronically filed by Monty Whetstone

Title: Vice President Operations

Email Address: prodmgr@mewbourne.com

Date: 1/6/2021

Phone: 903-561-2900

**OIL CONSERVATION DIVISION**

Approved By: Kurt Simmons

Title: Petroleum Specialist - A

Approved Date: 1/12/2021

Expiration Date: 1/12/2023

Conditions of Approval Attached

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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>98220                        | <sup>3</sup> Pool Name<br>PURPLE SAGE; WOLFCAMP GAS |
| <sup>4</sup> Property Code      | <sup>5</sup> Property Name<br>CHICAGO 9/8 WOHE FEE COM | <sup>6</sup> Well Number<br>2H                      |
| <sup>7</sup> OGRID NO.<br>14744 | <sup>8</sup> Operator Name<br>MEWBOURNE OIL COMPANY    | <sup>9</sup> Elevation<br>3013'                     |

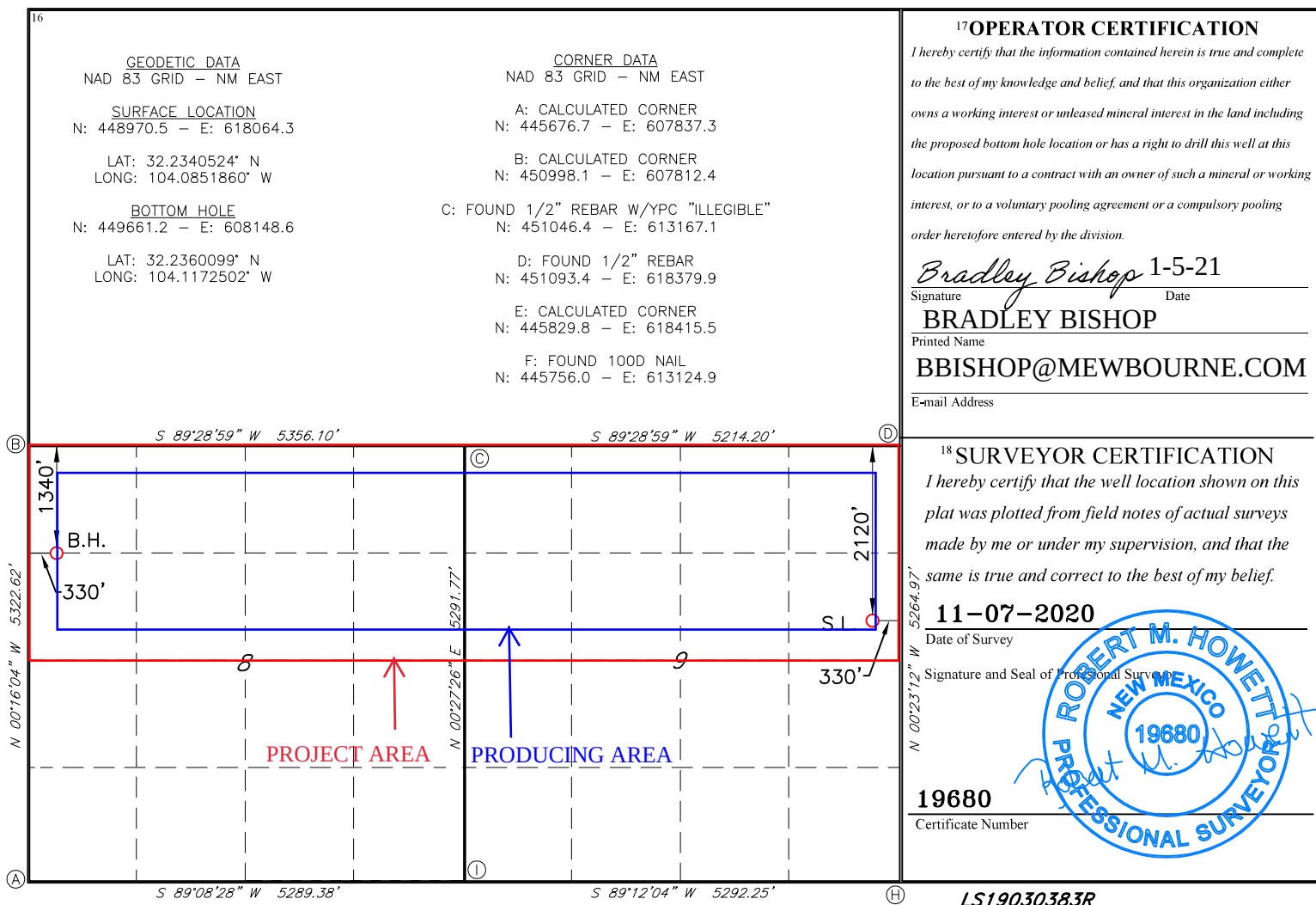
<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet From the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| H             | 9       | 24S      | 28E   |         | 2120          | NORTH            | 330           | EAST           | EDDY   |

<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 |
|--------------------------------------|-------------------------------|----------------------------------|-------------------------|---------|---------------|------------------|---------------|----------------|--------|
| E                                    | 8                             | 24S                              | 28E                     |         | 1340          | NORTH            | 330           | WEST           | EDDY   |
| <sup>12</sup> Dedicated Acres<br>640 | <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.



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

## GAS CAPTURE PLAN

Date: 1/12/2021

☒ Original

Operator & OGRID No.: [14744] MEWBOURNE OIL CO

☐ Amended - Reason for  
Amendment: \_\_\_\_\_

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

*Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).*

### Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

| Well Name                      | API          | Well Location (ULSTR) | Footages    | Expected MCF/D | Flared or Vented | Comments          |
|--------------------------------|--------------|-----------------------|-------------|----------------|------------------|-------------------|
| CHICAGO 9 8 WOHE FEE COM #002H | 30-015-47914 | H-9-24S-28E           | 2120N 0330E | 10             | None             | ONLINE AFTER FRAC |

### Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to LUCID ENERGY DELAWARE, LLC and will be connected to LUCID ENERGY DELAWARE, LLC Low Pressure gathering system located in Eddy County, New Mexico. It will require 3400' of pipeline to connect the facility to Low Pressure gathering system. MEWBOURNE OIL CO provides (periodically) to LUCID ENERGY DELAWARE, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, MEWBOURNE OIL CO and LUCID ENERGY DELAWARE, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at LUCID ENERGY DELAWARE, LLC Processing Plant located in Sec. 25, Twn. 18S, Rng. 25E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on LUCID ENERGY DELAWARE, LLC system at that time. Based on current information, it is MEWBOURNE OIL CO's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

### Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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

Form APD Comments

Permit 290946

PERMIT COMMENTS

|                                                                                            |  |                                         |
|--------------------------------------------------------------------------------------------|--|-----------------------------------------|
| Operator Name and Address:<br>MEWBOURNE OIL CO [14744]<br>P.O. Box 5270<br>Hobbs, NM 88241 |  | API Number:<br>30-015-47914             |
|                                                                                            |  | Well:<br>CHICAGO 9 8 WOHE FEE COM #002H |

|            |         |              |
|------------|---------|--------------|
| Created By | Comment | Comment Date |
|------------|---------|--------------|

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Form APD Conditions

Permit 290946

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

**PERMIT CONDITIONS OF APPROVAL**

|                                                                                            |                                         |
|--------------------------------------------------------------------------------------------|-----------------------------------------|
| Operator Name and Address:<br>MEWBOURNE OIL CO [14744]<br>P.O. Box 5270<br>Hobbs, NM 88241 | API Number:<br>30-015-47914             |
|                                                                                            | Well:<br>CHICAGO 9 8 WOHE FEE COM #002H |

|                 |                                                                                                                                                                                                                                                                      |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OCD<br>Reviewer | Condition                                                                                                                                                                                                                                                            |
| ksimmons        | Notify OCD 24 hours prior to casing & cement                                                                                                                                                                                                                         |
| ksimmons        | Will require a File As Drilled C-102 and a Directional Survey with the C-104                                                                                                                                                                                         |
| ksimmons        | Cement is required to circulate on both surface and intermediate1 strings of casing                                                                                                                                                                                  |
| kpickford       | Surface casing must be set 25' below top of Rustler Anhydrite or salt in order to seal off protectable water                                                                                                                                                         |
| kpickford       | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string |
| kpickford       | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string |
| kpickford       | The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud                                                                                                                                                                   |
| kpickford       | The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days      |

Intent ☐ As Drilled ☐

|                |                |             |
|----------------|----------------|-------------|
| API #          |                |             |
| Operator Name: | Property Name: | Well Number |

## Kick Off Point (KOP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

## First Take Point (FTP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

## Last Take Point (LTP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

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 |

KZ 06/29/2018

# **Mewbourne Oil Company**

**Eddy County, New Mexico NAD 83**

**Chicago 9/8 W0HE Fee Com #2H**

**Sec 9, T24S, R28E**

**SHL: 2120' FNL & 330' FEL, Sec 9**

**BHL: 1340' FNL & 330' FWL, Sec 8**

**Plan: Design #1**

## **Standard Planning Report**

**06 January, 2021**

## Planning Report

|                  |                                  |                                     |                                        |
|------------------|----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                            | <b>Local Co-ordinate Reference:</b> | Site Chicago 9/8 W0HE Fee Com #2H      |
| <b>Company:</b>  | Mewbourne Oil Company            | <b>TVD Reference:</b>               | WELL @ 3041.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83   | <b>MD Reference:</b>                | WELL @ 3041.0usft (Original Well Elev) |
| <b>Site:</b>     | Chicago 9/8 W0HE Fee Com #2H     | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 9, T24S, R28E                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 1340' FNL & 330' FWL, Sec 8 |                                     |                                        |
| <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        |                      |              |

|                              |                              |                     |                 |                                 |
|------------------------------|------------------------------|---------------------|-----------------|---------------------------------|
| <b>Site</b>                  | Chicago 9/8 W0HE Fee Com #2H |                     |                 |                                 |
| <b>Site Position:</b>        |                              | <b>Northing:</b>    | 448,971.00 usft | <b>Latitude:</b> 32.2340538     |
| <b>From:</b>                 | Map                          | <b>Easting:</b>     | 618,064.00 usft | <b>Longitude:</b> -104.0851869  |
| <b>Position Uncertainty:</b> | 0.0 usft                     | <b>Slot Radius:</b> | 13-3/16 "       | <b>Grid Convergence:</b> 0.13 ° |

|                             |                   |          |                            |                 |
|-----------------------------|-------------------|----------|----------------------------|-----------------|
| <b>Well</b>                 | Sec 9, T24S, R28E |          |                            |                 |
| <b>Well Position</b>        | <b>+N/-S</b>      | 0.0 usft | <b>Northing:</b>           | 448,971.00 usft |
|                             | <b>+E/-W</b>      | 0.0 usft | <b>Easting:</b>            | 618,064.00 usft |
| <b>Position Uncertainty</b> |                   | 0.0 usft | <b>Wellhead Elevation:</b> | 3,041.0 usft    |
|                             |                   |          | <b>Ground Level:</b>       | 3,013.0 usft    |

|                  |                                  |                    |                        |                      |                            |
|------------------|----------------------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | BHL: 1340' FNL & 330' FWL, Sec 8 |                    |                        |                      |                            |
| <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         | 7.39                   | 60.02                | 48,190                     |

|                          |                                |                     |                      |                      |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| <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                  | 273.98               |

| <b>Plan Sections</b>  |                 |             |                       |              |              |                         |                        |                       |         |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target                |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                       |
| 175.0                 | 0.00            | 0.00        | 175.0                 | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                       |
| 556.1                 | 5.72            | 21.94       | 555.5                 | 17.6         | 7.1          | 1.50                    | 1.50                   | 0.00                  | 21.94   |                       |
| 8,638.3               | 5.72            | 21.94       | 8,597.5               | 764.4        | 307.9        | 0.00                    | 0.00                   | 0.00                  | 0.00    |                       |
| 9,019.5               | 0.00            | 0.00        | 8,978.0               | 782.0        | 315.0        | 1.50                    | -1.50                  | 0.00                  | 180.00  | KOP: 1340' FNL & 10   |
| 9,927.3               | 90.77           | 269.48      | 9,551.0               | 776.8        | -265.7       | 10.00                   | 10.00                  | 0.00                  | -90.52  |                       |
| 19,577.8              | 90.77           | 269.48      | 9,421.0               | 690.0        | -9,915.0     | 0.00                    | 0.00                   | 0.00                  | 0.00    | BHL: 1340' FNL & 330' |



## Planning Report

|                  |                                  |                                     |                                        |
|------------------|----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                            | <b>Local Co-ordinate Reference:</b> | Site Chicago 9/8 W0HE Fee Com #2H      |
| <b>Company:</b>  | Mewbourne Oil Company            | <b>TVD Reference:</b>               | WELL @ 3041.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83   | <b>MD Reference:</b>                | WELL @ 3041.0usft (Original Well Elev) |
| <b>Site:</b>     | Chicago 9/8 W0HE Fee Com #2H     | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 9, T24S, R28E                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 1340' FNL & 330' FWL, Sec 8 |                                     |                                        |
| <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: 2120' FNL & 330' FEL (Sec 9) |                 |             |                       |              |              |                         |                         |                        |                       |
| 100.0                             | 0.00            | 0.00        | 100.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 175.0                             | 0.00            | 0.00        | 175.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 200.0                             | 0.38            | 21.94       | 200.0                 | 0.1          | 0.0          | 0.0                     | 1.50                    | 1.50                   | 0.00                  |
| 300.0                             | 1.88            | 21.94       | 300.0                 | 1.9          | 0.8          | -0.6                    | 1.50                    | 1.50                   | 0.00                  |
| 400.0                             | 3.38            | 21.94       | 399.9                 | 6.1          | 2.5          | -2.0                    | 1.50                    | 1.50                   | 0.00                  |
| 500.0                             | 4.88            | 21.94       | 499.6                 | 12.8         | 5.2          | -4.3                    | 1.50                    | 1.50                   | 0.00                  |
| 556.1                             | 5.72            | 21.94       | 555.5                 | 17.6         | 7.1          | -5.9                    | 1.50                    | 1.50                   | 0.00                  |
| 600.0                             | 5.72            | 21.94       | 599.1                 | 21.7         | 8.7          | -7.2                    | 0.00                    | 0.00                   | 0.00                  |
| 700.0                             | 5.72            | 21.94       | 698.7                 | 30.9         | 12.5         | -10.3                   | 0.00                    | 0.00                   | 0.00                  |
| 800.0                             | 5.72            | 21.94       | 798.2                 | 40.2         | 16.2         | -13.3                   | 0.00                    | 0.00                   | 0.00                  |
| 900.0                             | 5.72            | 21.94       | 897.7                 | 49.4         | 19.9         | -16.4                   | 0.00                    | 0.00                   | 0.00                  |
| 1,000.0                           | 5.72            | 21.94       | 997.2                 | 58.6         | 23.6         | -19.5                   | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0                           | 5.72            | 21.94       | 1,096.7               | 67.9         | 27.3         | -22.6                   | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0                           | 5.72            | 21.94       | 1,196.2               | 77.1         | 31.1         | -25.6                   | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0                           | 5.72            | 21.94       | 1,295.7               | 86.4         | 34.8         | -28.7                   | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0                           | 5.72            | 21.94       | 1,395.2               | 95.6         | 38.5         | -31.8                   | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0                           | 5.72            | 21.94       | 1,494.7               | 104.8        | 42.2         | -34.8                   | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0                           | 5.72            | 21.94       | 1,594.2               | 114.1        | 45.9         | -37.9                   | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0                           | 5.72            | 21.94       | 1,693.7               | 123.3        | 49.7         | -41.0                   | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0                           | 5.72            | 21.94       | 1,793.2               | 132.6        | 53.4         | -44.1                   | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0                           | 5.72            | 21.94       | 1,892.7               | 141.8        | 57.1         | -47.1                   | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0                           | 5.72            | 21.94       | 1,992.2               | 151.0        | 60.8         | -50.2                   | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0                           | 5.72            | 21.94       | 2,091.7               | 160.3        | 64.6         | -53.3                   | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0                           | 5.72            | 21.94       | 2,191.2               | 169.5        | 68.3         | -56.3                   | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0                           | 5.72            | 21.94       | 2,290.7               | 178.7        | 72.0         | -59.4                   | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0                           | 5.72            | 21.94       | 2,390.2               | 188.0        | 75.7         | -62.5                   | 0.00                    | 0.00                   | 0.00                  |
| 2,500.0                           | 5.72            | 21.94       | 2,489.7               | 197.2        | 79.4         | -65.6                   | 0.00                    | 0.00                   | 0.00                  |
| 2,600.0                           | 5.72            | 21.94       | 2,589.2               | 206.5        | 83.2         | -68.6                   | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0                           | 5.72            | 21.94       | 2,688.7               | 215.7        | 86.9         | -71.7                   | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0                           | 5.72            | 21.94       | 2,788.2               | 224.9        | 90.6         | -74.8                   | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0                           | 5.72            | 21.94       | 2,887.7               | 234.2        | 94.3         | -77.8                   | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0                           | 5.72            | 21.94       | 2,987.2               | 243.4        | 98.1         | -80.9                   | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0                           | 5.72            | 21.94       | 3,086.7               | 252.7        | 101.8        | -84.0                   | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0                           | 5.72            | 21.94       | 3,186.2               | 261.9        | 105.5        | -87.1                   | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0                           | 5.72            | 21.94       | 3,285.7               | 271.1        | 109.2        | -90.1                   | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0                           | 5.72            | 21.94       | 3,385.2               | 280.4        | 112.9        | -93.2                   | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0                           | 5.72            | 21.94       | 3,484.7               | 289.6        | 116.7        | -96.3                   | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0                           | 5.72            | 21.94       | 3,584.2               | 298.9        | 120.4        | -99.3                   | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0                           | 5.72            | 21.94       | 3,683.7               | 308.1        | 124.1        | -102.4                  | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0                           | 5.72            | 21.94       | 3,783.2               | 317.3        | 127.8        | -105.5                  | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0                           | 5.72            | 21.94       | 3,882.7               | 326.6        | 131.6        | -108.6                  | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0                           | 5.72            | 21.94       | 3,982.2               | 335.8        | 135.3        | -111.6                  | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0                           | 5.72            | 21.94       | 4,081.7               | 345.1        | 139.0        | -114.7                  | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0                           | 5.72            | 21.94       | 4,181.2               | 354.3        | 142.7        | -117.8                  | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0                           | 5.72            | 21.94       | 4,280.7               | 363.5        | 146.4        | -120.8                  | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0                           | 5.72            | 21.94       | 4,380.3               | 372.8        | 150.2        | -123.9                  | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0                           | 5.72            | 21.94       | 4,479.8               | 382.0        | 153.9        | -127.0                  | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0                           | 5.72            | 21.94       | 4,579.3               | 391.3        | 157.6        | -130.1                  | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0                           | 5.72            | 21.94       | 4,678.8               | 400.5        | 161.3        | -133.1                  | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0                           | 5.72            | 21.94       | 4,778.3               | 409.7        | 165.0        | -136.2                  | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0                           | 5.72            | 21.94       | 4,877.8               | 419.0        | 168.8        | -139.3                  | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0                           | 5.72            | 21.94       | 4,977.3               | 428.2        | 172.5        | -142.3                  | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                                  |                                     |                                        |
|------------------|----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                            | <b>Local Co-ordinate Reference:</b> | Site Chicago 9/8 W0HE Fee Com #2H      |
| <b>Company:</b>  | Mewbourne Oil Company            | <b>TVD Reference:</b>               | WELL @ 3041.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83   | <b>MD Reference:</b>                | WELL @ 3041.0usft (Original Well Elev) |
| <b>Site:</b>     | Chicago 9/8 W0HE Fee Com #2H     | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 9, T24S, R28E                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 1340' FNL & 330' FWL, Sec 8 |                                     |                                        |
| <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) |
| 5,100.0                           | 5.72            | 21.94       | 5,076.8               | 437.5        | 176.2        | -145.4                  | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0                           | 5.72            | 21.94       | 5,176.3               | 446.7        | 179.9        | -148.5                  | 0.00                    | 0.00                   | 0.00                  |
| 5,300.0                           | 5.72            | 21.94       | 5,275.8               | 455.9        | 183.7        | -151.6                  | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0                           | 5.72            | 21.94       | 5,375.3               | 465.2        | 187.4        | -154.6                  | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0                           | 5.72            | 21.94       | 5,474.8               | 474.4        | 191.1        | -157.7                  | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0                           | 5.72            | 21.94       | 5,574.3               | 483.7        | 194.8        | -160.8                  | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0                           | 5.72            | 21.94       | 5,673.8               | 492.9        | 198.5        | -163.8                  | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0                           | 5.72            | 21.94       | 5,773.3               | 502.1        | 202.3        | -166.9                  | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0                           | 5.72            | 21.94       | 5,872.8               | 511.4        | 206.0        | -170.0                  | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0                           | 5.72            | 21.94       | 5,972.3               | 520.6        | 209.7        | -173.1                  | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0                           | 5.72            | 21.94       | 6,071.8               | 529.8        | 213.4        | -176.1                  | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0                           | 5.72            | 21.94       | 6,171.3               | 539.1        | 217.2        | -179.2                  | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0                           | 5.72            | 21.94       | 6,270.8               | 548.3        | 220.9        | -182.3                  | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0                           | 5.72            | 21.94       | 6,370.3               | 557.6        | 224.6        | -185.3                  | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0                           | 5.72            | 21.94       | 6,469.8               | 566.8        | 228.3        | -188.4                  | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0                           | 5.72            | 21.94       | 6,569.3               | 576.0        | 232.0        | -191.5                  | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0                           | 5.72            | 21.94       | 6,668.8               | 585.3        | 235.8        | -194.6                  | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0                           | 5.72            | 21.94       | 6,768.3               | 594.5        | 239.5        | -197.6                  | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0                           | 5.72            | 21.94       | 6,867.8               | 603.8        | 243.2        | -200.7                  | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0                           | 5.72            | 21.94       | 6,967.3               | 613.0        | 246.9        | -203.8                  | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0                           | 5.72            | 21.94       | 7,066.8               | 622.2        | 250.6        | -206.8                  | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0                           | 5.72            | 21.94       | 7,166.3               | 631.5        | 254.4        | -209.9                  | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0                           | 5.72            | 21.94       | 7,265.8               | 640.7        | 258.1        | -213.0                  | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0                           | 5.72            | 21.94       | 7,365.3               | 650.0        | 261.8        | -216.1                  | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0                           | 5.72            | 21.94       | 7,464.8               | 659.2        | 265.5        | -219.1                  | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0                           | 5.72            | 21.94       | 7,564.3               | 668.4        | 269.3        | -222.2                  | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0                           | 5.72            | 21.94       | 7,663.8               | 677.7        | 273.0        | -225.3                  | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0                           | 5.72            | 21.94       | 7,763.3               | 686.9        | 276.7        | -228.3                  | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0                           | 5.72            | 21.94       | 7,862.8               | 696.2        | 280.4        | -231.4                  | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0                           | 5.72            | 21.94       | 7,962.3               | 705.4        | 284.1        | -234.5                  | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0                           | 5.72            | 21.94       | 8,061.8               | 714.6        | 287.9        | -237.6                  | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0                           | 5.72            | 21.94       | 8,161.4               | 723.9        | 291.6        | -240.6                  | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0                           | 5.72            | 21.94       | 8,260.9               | 733.1        | 295.3        | -243.7                  | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0                           | 5.72            | 21.94       | 8,360.4               | 742.4        | 299.0        | -246.8                  | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0                           | 5.72            | 21.94       | 8,459.9               | 751.6        | 302.8        | -249.8                  | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0                           | 5.72            | 21.94       | 8,559.4               | 760.8        | 306.5        | -252.9                  | 0.00                    | 0.00                   | 0.00                  |
| 8,638.3                           | 5.72            | 21.94       | 8,597.5               | 764.4        | 307.9        | -254.1                  | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0                           | 4.79            | 21.94       | 8,658.9               | 769.6        | 310.0        | -255.8                  | 1.50                    | -1.50                  | 0.00                  |
| 8,800.0                           | 3.29            | 21.94       | 8,758.7               | 776.2        | 312.6        | -258.0                  | 1.50                    | -1.50                  | 0.00                  |
| 8,900.0                           | 1.79            | 21.94       | 8,858.6               | 780.3        | 314.3        | -259.4                  | 1.50                    | -1.50                  | 0.00                  |
| 9,000.0                           | 0.29            | 21.94       | 8,958.5               | 782.0        | 315.0        | -259.9                  | 1.50                    | -1.50                  | 0.00                  |
| 9,019.5                           | 0.00            | 0.00        | 8,978.0               | 782.0        | 315.0        | -260.0                  | 1.50                    | -1.50                  | 0.00                  |
| KOP: 1340' FNL & 10' FEL (Sec 9)  |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,100.0                           | 8.05            | 269.48      | 9,058.3               | 781.9        | 309.3        | -254.3                  | 10.00                   | 10.00                  | 0.00                  |
| 9,200.0                           | 18.05           | 269.48      | 9,155.6               | 781.7        | 286.8        | -231.8                  | 10.00                   | 10.00                  | 0.00                  |
| 9,300.0                           | 28.05           | 269.48      | 9,247.5               | 781.4        | 247.7        | -192.8                  | 10.00                   | 10.00                  | 0.00                  |
| 9,400.0                           | 38.05           | 269.48      | 9,331.2               | 780.9        | 193.2        | -138.6                  | 10.00                   | 10.00                  | 0.00                  |
| 9,500.0                           | 48.05           | 269.48      | 9,404.2               | 780.3        | 125.1        | -70.6                   | 10.00                   | 10.00                  | 0.00                  |
| 9,600.0                           | 58.04           | 269.48      | 9,464.2               | 779.6        | 45.3         | 9.0                     | 10.00                   | 10.00                  | 0.00                  |
| 9,657.5                           | 63.80           | 269.48      | 9,492.2               | 779.1        | -5.0         | 59.1                    | 10.00                   | 10.00                  | 0.00                  |
| FTP: 1340' FNL & 330' FEL (Sec 9) |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,700.0                           | 68.04           | 269.48      | 9,509.5               | 778.8        | -43.8        | 97.7                    | 10.00                   | 10.00                  | 0.00                  |
| 9,800.0                           | 78.04           | 269.48      | 9,538.6               | 777.9        | -139.3       | 193.0                   | 10.00                   | 10.00                  | 0.00                  |
| 9,900.0                           | 88.04           | 269.48      | 9,550.7               | 777.0        | -238.4       | 291.8                   | 10.00                   | 10.00                  | 0.00                  |

## Planning Report

|                  |                                  |                                     |                                        |
|------------------|----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                            | <b>Local Co-ordinate Reference:</b> | Site Chicago 9/8 W0HE Fee Com #2H      |
| <b>Company:</b>  | Mewbourne Oil Company            | <b>TVD Reference:</b>               | WELL @ 3041.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83   | <b>MD Reference:</b>                | WELL @ 3041.0usft (Original Well Elev) |
| <b>Site:</b>     | Chicago 9/8 W0HE Fee Com #2H     | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 9, T24S, R28E                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 1340' FNL & 330' FWL, Sec 8 |                                     |                                        |
| <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) |
| 9,927.3                          | 90.77           | 269.48      | 9,551.0               | 776.8        | -265.7       | 319.0                   | 10.00                   | 10.00                  | 0.00                  |
| LP: 1340' FNL & 596' FEL (Sec 9) |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,000.0                         | 90.77           | 269.48      | 9,550.0               | 776.1        | -338.4       | 391.5                   | 0.01                    | 0.01                   | 0.00                  |
| 10,100.0                         | 90.77           | 269.48      | 9,548.7               | 775.2        | -438.4       | 491.2                   | 0.00                    | 0.00                   | 0.00                  |
| 10,200.0                         | 90.77           | 269.48      | 9,547.3               | 774.3        | -538.4       | 590.8                   | 0.00                    | 0.00                   | 0.00                  |
| 10,300.0                         | 90.77           | 269.48      | 9,546.0               | 773.4        | -638.4       | 690.5                   | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0                         | 90.77           | 269.48      | 9,544.6               | 772.5        | -738.4       | 790.2                   | 0.00                    | 0.00                   | 0.00                  |
| 10,500.0                         | 90.77           | 269.48      | 9,543.3               | 771.6        | -838.3       | 889.9                   | 0.00                    | 0.00                   | 0.00                  |
| 10,600.0                         | 90.77           | 269.48      | 9,541.9               | 770.7        | -938.3       | 989.6                   | 0.00                    | 0.00                   | 0.00                  |
| 10,700.0                         | 90.77           | 269.48      | 9,540.6               | 769.8        | -1,038.3     | 1,089.3                 | 0.00                    | 0.00                   | 0.00                  |
| 10,800.0                         | 90.77           | 269.48      | 9,539.2               | 768.9        | -1,138.3     | 1,188.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,900.0                         | 90.77           | 269.48      | 9,537.9               | 768.0        | -1,238.3     | 1,288.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,000.0                         | 90.77           | 269.48      | 9,536.6               | 767.1        | -1,338.3     | 1,388.3                 | 0.00                    | 0.00                   | 0.00                  |
| 11,100.0                         | 90.77           | 269.48      | 9,535.2               | 766.2        | -1,438.3     | 1,488.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,200.0                         | 90.77           | 269.48      | 9,533.9               | 765.3        | -1,538.3     | 1,587.7                 | 0.00                    | 0.00                   | 0.00                  |
| 11,300.0                         | 90.77           | 269.48      | 9,532.5               | 764.4        | -1,638.2     | 1,687.4                 | 0.00                    | 0.00                   | 0.00                  |
| 11,400.0                         | 90.77           | 269.48      | 9,531.2               | 763.5        | -1,738.2     | 1,787.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,500.0                         | 90.77           | 269.48      | 9,529.8               | 762.6        | -1,838.2     | 1,886.7                 | 0.00                    | 0.00                   | 0.00                  |
| 11,600.0                         | 90.77           | 269.48      | 9,528.5               | 761.7        | -1,938.2     | 1,986.4                 | 0.00                    | 0.00                   | 0.00                  |
| 11,700.0                         | 90.77           | 269.48      | 9,527.1               | 760.8        | -2,038.2     | 2,086.1                 | 0.00                    | 0.00                   | 0.00                  |
| 11,800.0                         | 90.77           | 269.48      | 9,525.8               | 759.9        | -2,138.2     | 2,185.8                 | 0.00                    | 0.00                   | 0.00                  |
| 11,900.0                         | 90.77           | 269.48      | 9,524.4               | 759.0        | -2,238.2     | 2,285.5                 | 0.00                    | 0.00                   | 0.00                  |
| 12,000.0                         | 90.77           | 269.48      | 9,523.1               | 758.1        | -2,338.1     | 2,385.1                 | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0                         | 90.77           | 269.48      | 9,521.7               | 757.2        | -2,438.1     | 2,484.8                 | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0                         | 90.77           | 269.48      | 9,520.4               | 756.3        | -2,538.1     | 2,584.5                 | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0                         | 90.77           | 269.48      | 9,519.0               | 755.4        | -2,638.1     | 2,684.2                 | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0                         | 90.77           | 269.48      | 9,517.7               | 754.5        | -2,738.1     | 2,783.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0                         | 90.77           | 269.48      | 9,516.3               | 753.6        | -2,838.1     | 2,883.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0                         | 90.77           | 269.48      | 9,515.0               | 752.7        | -2,938.1     | 2,983.2                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0                         | 90.77           | 269.48      | 9,513.6               | 751.8        | -3,038.1     | 3,082.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0                         | 90.77           | 269.48      | 9,512.3               | 750.9        | -3,138.0     | 3,182.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0                         | 90.77           | 269.48      | 9,511.0               | 750.0        | -3,238.0     | 3,282.3                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0                         | 90.77           | 269.48      | 9,509.6               | 749.1        | -3,338.0     | 3,382.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0                         | 90.77           | 269.48      | 9,508.3               | 748.2        | -3,438.0     | 3,481.7                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0                         | 90.77           | 269.48      | 9,506.9               | 747.3        | -3,538.0     | 3,581.3                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0                         | 90.77           | 269.48      | 9,505.6               | 746.5        | -3,638.0     | 3,681.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,400.0                         | 90.77           | 269.48      | 9,504.2               | 745.6        | -3,738.0     | 3,780.7                 | 0.00                    | 0.00                   | 0.00                  |
| 13,500.0                         | 90.77           | 269.48      | 9,502.9               | 744.7        | -3,838.0     | 3,880.4                 | 0.00                    | 0.00                   | 0.00                  |
| 13,600.0                         | 90.77           | 269.48      | 9,501.5               | 743.8        | -3,937.9     | 3,980.1                 | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0                         | 90.77           | 269.48      | 9,500.2               | 742.9        | -4,037.9     | 4,079.8                 | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0                         | 90.77           | 269.48      | 9,498.8               | 742.0        | -4,137.9     | 4,179.4                 | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0                         | 90.77           | 269.48      | 9,497.5               | 741.1        | -4,237.9     | 4,279.1                 | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0                         | 90.77           | 269.48      | 9,496.1               | 740.2        | -4,337.9     | 4,378.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0                         | 90.77           | 269.48      | 9,494.8               | 739.3        | -4,437.9     | 4,478.5                 | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0                         | 90.77           | 269.48      | 9,493.4               | 738.4        | -4,537.9     | 4,578.2                 | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0                         | 90.77           | 269.48      | 9,492.1               | 737.5        | -4,637.8     | 4,677.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,400.0                         | 90.77           | 269.48      | 9,490.7               | 736.6        | -4,737.8     | 4,777.5                 | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0                         | 90.77           | 269.48      | 9,489.4               | 735.7        | -4,837.8     | 4,877.2                 | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0                         | 90.77           | 269.48      | 9,488.1               | 734.8        | -4,937.8     | 4,976.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0                         | 90.77           | 269.48      | 9,486.7               | 733.9        | -5,037.8     | 5,076.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0                         | 90.77           | 269.48      | 9,485.4               | 733.0        | -5,137.8     | 5,176.3                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0                         | 90.77           | 269.48      | 9,484.0               | 732.1        | -5,237.8     | 5,276.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,000.0                         | 90.77           | 269.48      | 9,482.7               | 731.2        | -5,337.8     | 5,375.6                 | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                                  |                                     |                                        |
|------------------|----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                            | <b>Local Co-ordinate Reference:</b> | Site Chicago 9/8 W0HE Fee Com #2H      |
| <b>Company:</b>  | Mewbourne Oil Company            | <b>TVD Reference:</b>               | WELL @ 3041.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83   | <b>MD Reference:</b>                | WELL @ 3041.0usft (Original Well Elev) |
| <b>Site:</b>     | Chicago 9/8 W0HE Fee Com #2H     | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 9, T24S, R28E                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 1340' FNL & 330' FWL, Sec 8 |                                     |                                        |
| <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) |  |
| 15,100.0                          | 90.77           | 269.48      | 9,481.3               | 730.3        | -5,437.7     | 5,475.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,200.0                          | 90.77           | 269.48      | 9,480.0               | 729.4        | -5,537.7     | 5,575.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,300.0                          | 90.77           | 269.48      | 9,478.6               | 728.5        | -5,637.7     | 5,674.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,400.0                          | 90.77           | 269.48      | 9,477.3               | 727.6        | -5,737.7     | 5,774.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,500.0                          | 90.77           | 269.48      | 9,475.9               | 726.7        | -5,837.7     | 5,874.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,600.0                          | 90.77           | 269.48      | 9,474.6               | 725.8        | -5,937.7     | 5,973.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,700.0                          | 90.77           | 269.48      | 9,473.2               | 724.9        | -6,037.7     | 6,073.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,800.0                          | 90.77           | 269.48      | 9,471.9               | 724.0        | -6,137.6     | 6,173.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,900.0                          | 90.77           | 269.48      | 9,470.5               | 723.1        | -6,237.6     | 6,272.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,000.0                          | 90.77           | 269.48      | 9,469.2               | 722.2        | -6,337.6     | 6,372.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,100.0                          | 90.77           | 269.48      | 9,467.8               | 721.3        | -6,437.6     | 6,472.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,200.0                          | 90.77           | 269.48      | 9,466.5               | 720.4        | -6,537.6     | 6,571.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,300.0                          | 90.77           | 269.48      | 9,465.2               | 719.5        | -6,637.6     | 6,671.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,400.0                          | 90.77           | 269.48      | 9,463.8               | 718.6        | -6,737.6     | 6,771.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,500.0                          | 90.77           | 269.48      | 9,462.5               | 717.7        | -6,837.6     | 6,870.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,600.0                          | 90.77           | 269.48      | 9,461.1               | 716.8        | -6,937.5     | 6,970.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,700.0                          | 90.77           | 269.48      | 9,459.8               | 715.9        | -7,037.5     | 7,070.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,800.0                          | 90.77           | 269.48      | 9,458.4               | 715.0        | -7,137.5     | 7,169.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,900.0                          | 90.77           | 269.48      | 9,457.1               | 714.1        | -7,237.5     | 7,269.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,000.0                          | 90.77           | 269.48      | 9,455.7               | 713.2        | -7,337.5     | 7,369.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,100.0                          | 90.77           | 269.48      | 9,454.4               | 712.3        | -7,437.5     | 7,469.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,200.0                          | 90.77           | 269.48      | 9,453.0               | 711.4        | -7,537.5     | 7,568.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,300.0                          | 90.77           | 269.48      | 9,451.7               | 710.5        | -7,637.5     | 7,668.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,400.0                          | 90.77           | 269.48      | 9,450.3               | 709.6        | -7,737.4     | 7,768.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,500.0                          | 90.77           | 269.48      | 9,449.0               | 708.7        | -7,837.4     | 7,867.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,600.0                          | 90.77           | 269.48      | 9,447.6               | 707.8        | -7,937.4     | 7,967.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,700.0                          | 90.77           | 269.48      | 9,446.3               | 706.9        | -8,037.4     | 8,067.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,800.0                          | 90.77           | 269.48      | 9,444.9               | 706.0        | -8,137.4     | 8,166.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,900.0                          | 90.77           | 269.48      | 9,443.6               | 705.1        | -8,237.4     | 8,266.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,000.0                          | 90.77           | 269.48      | 9,442.3               | 704.2        | -8,337.4     | 8,366.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,100.0                          | 90.77           | 269.48      | 9,440.9               | 703.3        | -8,437.3     | 8,465.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,200.0                          | 90.77           | 269.48      | 9,439.6               | 702.4        | -8,537.3     | 8,565.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,300.0                          | 90.77           | 269.48      | 9,438.2               | 701.5        | -8,637.3     | 8,665.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,400.0                          | 90.77           | 269.48      | 9,436.9               | 700.6        | -8,737.3     | 8,764.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,500.0                          | 90.77           | 269.48      | 9,435.5               | 699.7        | -8,837.3     | 8,864.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,600.0                          | 90.77           | 269.48      | 9,434.2               | 698.8        | -8,937.3     | 8,964.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,700.0                          | 90.77           | 269.48      | 9,432.8               | 697.9        | -9,037.3     | 9,063.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,800.0                          | 90.77           | 269.48      | 9,431.5               | 697.0        | -9,137.3     | 9,163.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,900.0                          | 90.77           | 269.48      | 9,430.1               | 696.1        | -9,237.2     | 9,263.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,000.0                          | 90.77           | 269.48      | 9,428.8               | 695.2        | -9,337.2     | 9,363.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,100.0                          | 90.77           | 269.48      | 9,427.4               | 694.3        | -9,437.2     | 9,462.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,200.0                          | 90.77           | 269.48      | 9,426.1               | 693.4        | -9,537.2     | 9,562.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,300.0                          | 90.77           | 269.48      | 9,424.7               | 692.5        | -9,637.2     | 9,662.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,400.0                          | 90.77           | 269.48      | 9,423.4               | 691.6        | -9,737.2     | 9,761.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,500.0                          | 90.77           | 269.48      | 9,422.0               | 690.7        | -9,837.2     | 9,861.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,577.8                          | 90.77           | 269.48      | 9,421.0               | 690.0        | -9,915.0     | 9,939.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| BHL: 1340' FNL & 330' FWL (Sec 8) |                 |             |                       |              |              |                         |                         |                        |                       |  |

## Planning Report

|                  |                                  |                                     |                                        |
|------------------|----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | Hobbs                            | <b>Local Co-ordinate Reference:</b> | Site Chicago 9/8 W0HE Fee Com #2H      |
| <b>Company:</b>  | Mewbourne Oil Company            | <b>TVD Reference:</b>               | WELL @ 3041.0usft (Original Well Elev) |
| <b>Project:</b>  | Eddy County, New Mexico NAD 83   | <b>MD Reference:</b>                | WELL @ 3041.0usft (Original Well Elev) |
| <b>Site:</b>     | Chicago 9/8 W0HE Fee Com #2H     | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Sec 9, T24S, R28E                | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | BHL: 1340' FNL & 330' FWL, Sec 8 |                                     |                                        |
| <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: 2120' FNL & 330' F<br>- plan hits target center<br>- Point | 0.00             | 0.00            | 0.0           | 0.0             | 0.0             | 448,971.00         | 618,064.00        | 32.2340538 | -104.0851869 |
| KOP: 1340' FNL & 10' FI<br>- plan hits target center<br>- Point | 0.00             | 0.00            | 8,978.0       | 782.0           | 315.0           | 449,753.00         | 618,379.00        | 32.2362014 | -104.0841622 |
| BHL: 1340' FNL & 330' F<br>- plan hits target center<br>- Point | 0.00             | 0.00            | 9,421.0       | 690.0           | -9,915.0        | 449,661.00         | 608,149.00        | 32.2360094 | -104.1172489 |
| FTP: 1340' FNL & 330' F<br>- plan hits target center<br>- Point | 0.00             | 0.00            | 9,492.2       | 779.1           | -5.0            | 449,750.12         | 618,059.00        | 32.2361955 | -104.0851972 |
| LP: 1340' FNL & 596' FE<br>- plan hits target center<br>- Point | 0.00             | 0.00            | 9,551.0       | 776.8           | -265.7          | 449,747.80         | 617,798.30        | 32.2361908 | -104.0860404 |